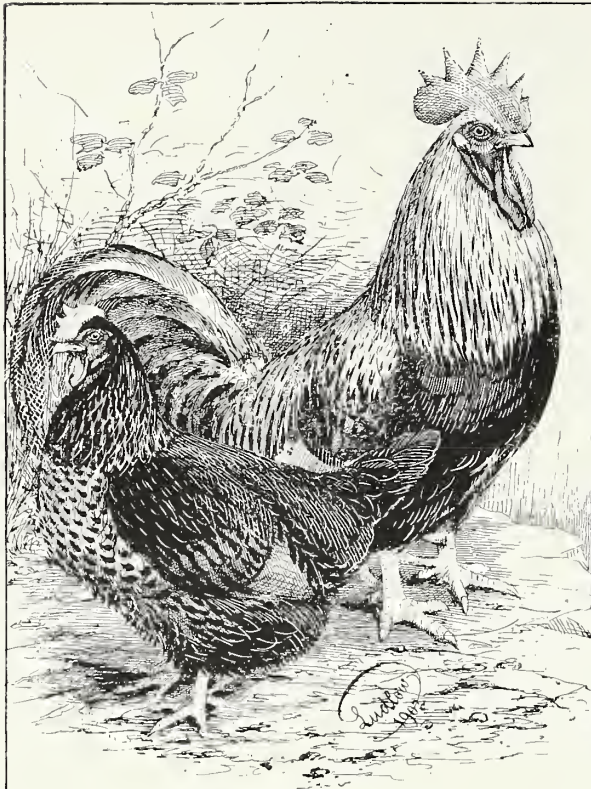


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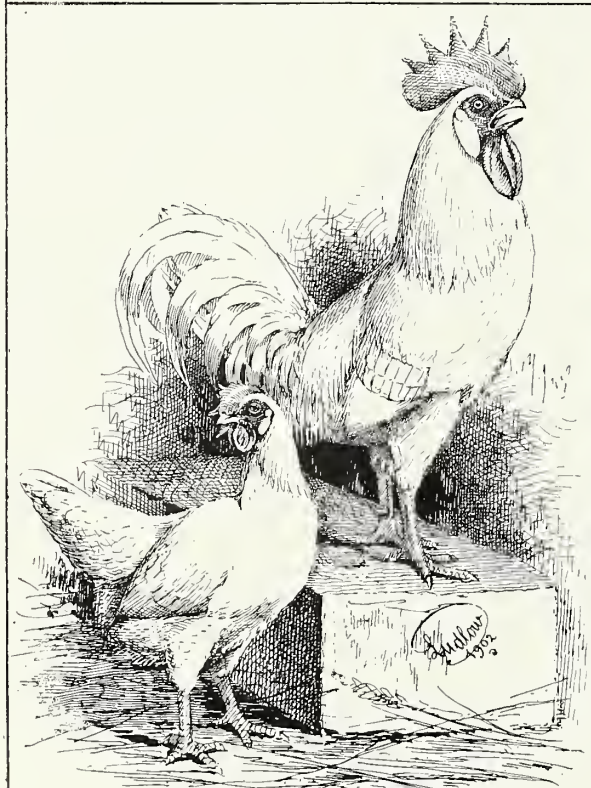
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*DARK DORKINGS -*



*BUFF ORPINGTONS -*



*WHITE LEGHORNS -*



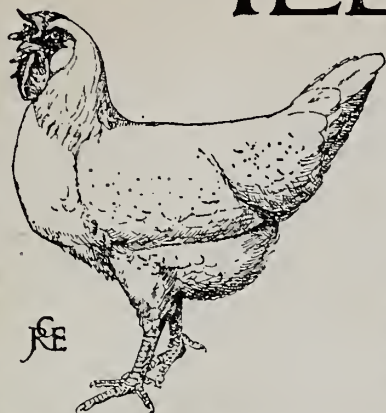
*WHITE WYANDOTTES -*

**FOUR POPULAR BREEDS.**

*[Copyright.]*



# THE ILLUSTRATED POULTRY RECORD



VOL. IV.—No. 3.

December 1, 1911.

Monthly Sixpence Net.

## DIARY OF THE MONTH.

### EDITORIAL NOTICES.

Telegrams: "VIVACIDAD." Telephone: CITY, 2083.  
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*The Editor will be glad to consider any MSS., photographs, or sketches submitted to him, but they should be accompanied by stamped addressed envelopes for return if unsuitable. In case of loss or injury he cannot hold himself responsible for MSS., photographs, or sketches, and publication in the ILLUSTRATED POULTRY RECORD can alone be taken as evidence of acceptance. The name and address of the owner should be placed on the back of all pictures and MSS. All rights of reproduction and translation are reserved.*

*The Editor will be glad to hear from readers on any Poultry Topics, and all Queries addressed to the paper will be answered by experts in the several departments. The desire is to help those who are in difficulty regarding the management of their poultry, and accordingly no charge for answering such queries is made.*

*The Annual Subscription to the ILLUSTRATED POULTRY RECORD at home and abroad is 8s., including postage, except to Canada, in which case it is 7s. Cheques and P.O.O.'s should be made payable to the ILLUSTRATED POULTRY RECORD.*

*The ILLUSTRATED POULTRY RECORD is published on the first of every month. Should readers experience any difficulty in securing their copies promptly they are requested to communicate immediately with the Editor. The latest date for receiving advertisements is the 20th of the month preceding date of issue.*

*The utmost care is exercised to exclude all advertisements of a doubtful character. If any reader has substantial grounds for complaint against an advertiser he is requested to communicate at once with the Editor.*

### The Evolution of German Poultry-Breeding.

We are enabled to give in this issue a brief sketch of the historical aspect of poultry-breeding in Germany, which we are sure will be read with the deepest interest, and it is a satisfaction to place on record facts not generally known. As to the later developments it is unnecessary to deal as these are sketched in the article. What may, however, command special attention are the influence of wars and international embroilments upon the various pursuits which go to make up human life. Sometimes in reading newspapers and novels descriptive of the march of armies we are amused at the experiences in catching stray hens or raiding the enemies' farms. What we forget are the after-effects, the trail of desolation which is left behind, profoundly modifying the whole aspect of the countryside. In this article can be seen how again and again Germany was swept by contending hosts, as for centuries it was the battle area of Europe. It is small wonder, therefore, that in many directions where such was the case developments have assumed different forms from those met with in countries which have, happily, been free from these devastating influences. One great value which the fowl possesses is the rapidity of reproduction, so that a country can speedily repair its ravages, as we saw in France after 1871. One further point—not a new one, however—which this article brings forward is the vast influence the old abbeys and monasteries exerted in improvement of the live stock and agriculture generally in the districts wherein they were situated. That is not always as fully realised as it ought to be. Many of the earlier writers were monks.



### Poultry-Breeding Farms.

Looking over advertisements in our own columns and elsewhere we have frequently wondered whether a better system of naming might not be adopted, one which would prevent the misconceptions which frequently arise. Recently we were visited by a man who was thinking of starting a poultry-farm, one with a modest amount of knowledge of the subject. Stating, as we are wont to do, some of the difficulties which have to be faced in such an undertaking, the inquirer pointed to the number of advertisements from poultry-farms appearing in our own columns and those of our contemporaries. He was considerably surprised when it was pointed out that the bulk of these made sale of eggs and poultry for food a very small part of their busi-

ness, and that in the larger especially it is the trade in stock-birds, etc., which gives them the success they have achieved. This leads to the question whether it would be desirable if poultry-men should follow other stock-breeders and designate their places in accordance with what they really are—namely, “poultry breeding-farms”—leaving the shorter title to those which are concerned with supplying ordinary market requirements. That would be advantageous in many ways and prevent a great amount of confusion. That the former would gain thereby is unquestionable. At any rate, it would clearly indicate what they really are.

### Laying Competitions.

An article in a recent issue of the “Journal of the Board of Agriculture” makes comparisons

between English and Australian laying competitions in a novel manner, illustrating the points by tables and diagrams, the latter in order to show how remarkably even in each case is what we term the frequency of curve. In the Utility Poultry Club's competitions for 1910-11 the entire flocks numbered 448, and for the sixteen weeks this contest lasted the mean or average was 42.84 eggs per hen. Whilst 17 birds never laid an egg, one produced 103 eggs. But the remarkable fact is here shown that of the number named, 209 laid fewer than the average, and 239 laid more, so that the balance above and below was nearly equal. Practically the same result was found in the South Australian competitions, which, however, extended over a year. In these were 774 birds. The mean or average was



ON THE RANKIN DUCK FARM, U.S.A. [Copyright.]  
Showing Unheated Houses for Ducklings, Incubator Cellar, and Other Buildings.

178.04 eggs. One lot of six averaged only 100.66, but at the other end of the scale another lot averaged 252.16. Between the two extremes were the greater number. Two pens (12 birds) were at the mean, 384 were below, and 378 above, so that the balance in this case was even closer.

### The Nervousness of Ducks.

Many duck-raisers are very reluctant to permit visitors to approach their birds during the fattening stages, for the reason that they appear to be frightened by the presence of strangers, and as a result make no growth for some hours afterwards. The same has been noted as to chickens undergoing a similar process. It has been attributed to nervousness as a result of the abnormal conditions under which the flocks are kept. *Farm Poultry* makes a suggestion which is



worth consideration. Speaking of the Weber plant at Wrentham, Mass., it is stated:

A watering system has been installed by which water is piped to every pen, and the supply made constant at great reduction of labour. I noticed that the ducklings of all ages, but especially those in the fattening-yards, were much less disturbed by visitors than formerly. Mr. Weber said that as soon as the constant supply of water in troughs was established, the ducks seemed more contented, and less susceptible to outside causes of disturbance. . . . It would appear that the timidity of ducks is largely nervousness, due to lack of occupation, and that it can be in a measure overcome by so simple a device as keeping the supply of water constant.

It should be remembered that Weber Bros. have hitherto adopted the dry system of rearing ducklings. This alteration of view, therefore, speaks volumes.

#### National Poultry Institute.

It would appear that the prospects of establishing a National Poultry Institute on a broad basis have greatly improved within the last month, and that by the time these lines appear it may be regarded as a certainty, provided that the Provisional Committee is supported in its efforts. The deputation appointed to submit evidence to the Development Commissioners—Messrs. Charles Bathurst, M.P., F. W. Verney, and Edward Brown, F.L.S.—seem to have well supported the application already made, for it is stated that the Commissioners came to the conclusion that, subject to certain conditions, a case had been made out for recommending a grant from the Development Fund. Upon this result the Provisional Committee deserve the warmest congratulations of all interested in the poultry industry. There is yet much to be done ere the project can be fully realised, but with so large, influential, and representative a Committee, we have no doubt whatever that they will be successful. A large amount of earnest and hard work has been put into this scheme, which will find its reward in the establishment of a great Central Institute on broad lines, capable of dealing with every branch of the poultry industry.

#### The Crystal Palace Show.

The tenth Grand International Poultry Show, which was held at the Crystal Palace on November 14, 15, and 16, proved a record in more ways than one. The number of poultry entries—six thousand two hundred and fifty-seven—was indeed remarkable, and the executive seems fully justified in claiming that this fixture “is the most important show in the world. We deal elsewhere in the paper with the exhibits and with the display of appliances and foods, but there are one or two special points to which we may refer here. Perhaps the most remarkable feature was the truly extraordinary display of Orpingtons and Wyandottes.

These two breeds are responsible between them for one thousand six hundred and eighty-one entries. This is to say that more than a quarter of the total number of exhibits was for Orpingtons and Wyandottes. A feature of the Show, and one which aroused quite a mild sensation, was the special display of Belgian bantams. The birds were penned in a very artistic manner, and in such a way that their points could be seen to perfection. Altogether the Show was an extremely interesting one, while the quality and number of the exhibits left little to be desired.

#### Table Poultry Production.

At the Crystal Palace Show an informal and preliminary meeting was held to consider whether steps should be taken to form a Table Poultry Club, with the object of promoting a branch of poultry-keeping which has not received the attention of late years given to egg-production. This is one result of the articles and letters appearing in the *POULTRY RECORD*, by Mr. J. W. Hurst and others, as well as the advocacy of rearing tests advocated for some time in our contemporaries. It was decided to hold another meeting at the Smithfield Club Show this month. Meanwhile, with a view to the avoidance of duplication of societies, a resolution was passed to invite the Utility Poultry Club to undertake the work suggested, and to attempt for table poultry what it has done for many years for egg-laying by means of its laying competitions. That would be the preferable course to adopt, as the club named has a large experience to draw upon and the organisation necessary for such contests as those suggested. The time is fully ripe for taking up the question and endeavouring to extend the poultry side, as well as obtain data not now available.

#### Congratulations to a Contemporary.

We beg to offer our very hearty congratulations and our best wishes for success to the new proprietors of *Poultry*. Mr. O. F. Bates and Mr. C. N. Goode, both celebrated breeders and exhibitors, have become sole proprietors of this old-established journal, and we understand that the paper is to be permanently enlarged, while several new features are being introduced. The issue of November 17—the first under the new proprietorship—augurs well for the future, and it is our earnest hope that there are many years of valuable work before our esteemed contemporary.

Although no announcement has been made, we understand that while a change has taken place in the proprietorship of *Poultry*, Mr. F. J. Broomhead retains the position of Editor, a position which he has filled so admirably for many years past. The services of Mr. W. W. Broomhead are likewise retained, and to both we offer our sincere congratulations, and our warmest wishes for a brilliant and useful future.



## "BIRD-CAGE" POULTRY - KEEPING.

By EDWARD BROWN, F.L.S.



HE above title is not my own. It was used in a Canadian journal to describe the system which for some time has been boomed across the Atlantic, and is being advocated on this side. The appropriateness to these methods cannot be denied.

In view of statements which are being made, it is desirable to bring the cold light of reason and of experience to bear, to examine how far these are justifiable, and what are the opportunities and limitations of the system. In this connection I do not propose to discuss the question of fireless brooders, as these are not inseparable from "bird-cage" poultry-keeping. The cubic capacity of one of these is as great as in an ordinary heated brooder, and as chickens do not remain long in either, the permanent effects are comparatively small. My limited experience with them has been entirely favourable, leading to the suggestion as to whether the object of a brooder or foster-mother should not be to conserve the body-heat of chickens rather than to apply external warmth. That is a point for careful investigation, for widened observations and experience. Therefore, fireless brooders are left entirely outside our present consideration.

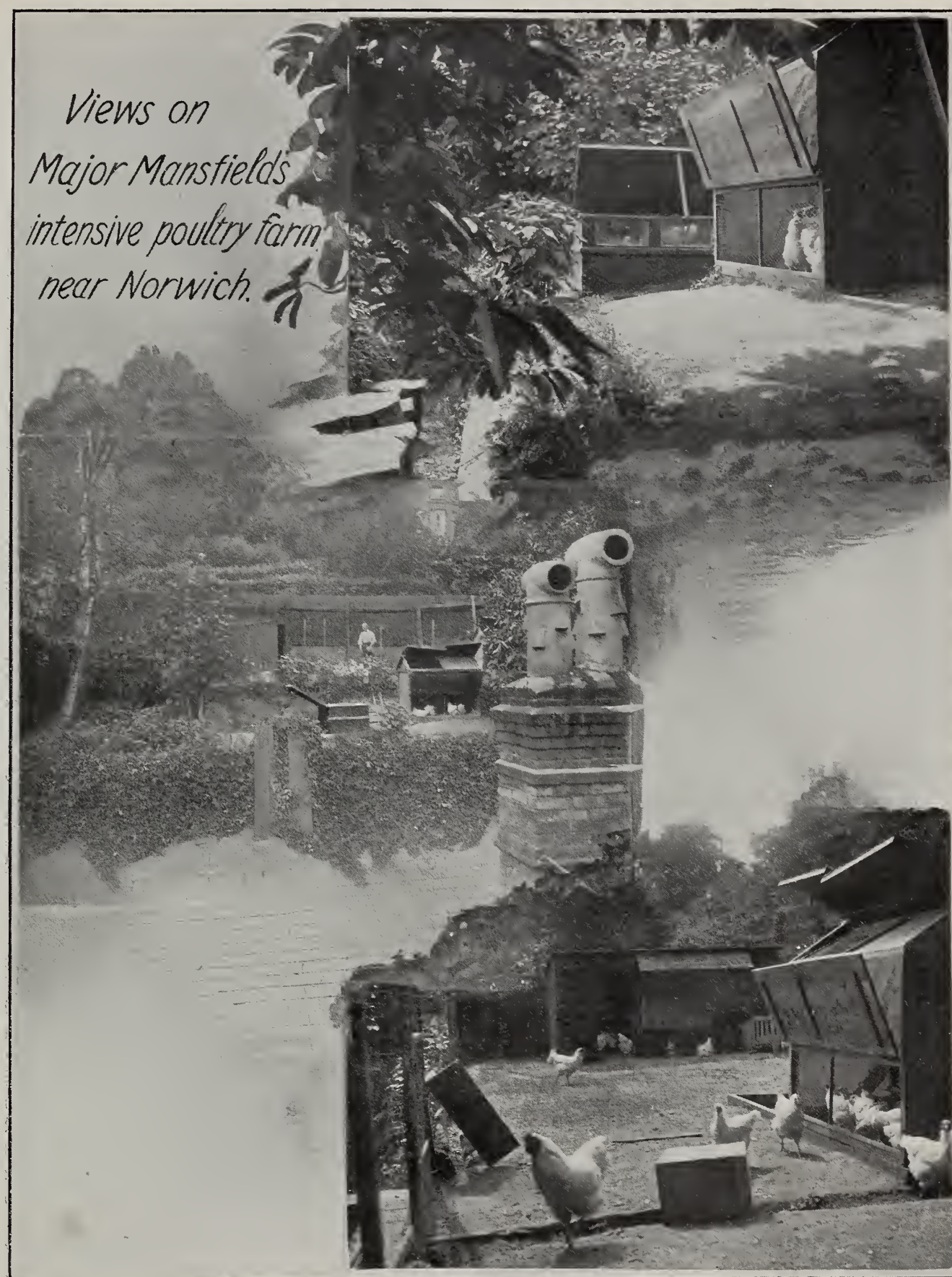
Advocates of new methods of poultry-keeping sometimes resent criticism, forgetful of the fact that this is inseparable from all progress. Any system which cannot stand criticising is worthless. It is often in that way weaknesses are pointed out and remedied. We want to lop off extravagances and exaggerations to which many are so prone. It is an interesting fact that we appear to be sounding the whole gamut of poultry-keeping. Extremes are said to meet. If that is so, the circle should be complete. On one hand we have the Philo "bird-cage" system with its six hens, and on the other the Rancoas unit of 500 hens in a single house. The test of each is economic, that is, whether an adequate return can be permanently secured to meet the cost of labour and general expenses and leave a margin of profit. Not one or two years, but many must decide that question. If we believed all that has been stated, it might be thought that this Philo or city system is going to revolutionise poultry-keeping on larger occupations as well as on small plots, but that, in my judgment, is absolute nonsense.

The fact is, this system is neither strange nor new in principle, though the application is varied. In earlier days many of the northern men abundantly proved how much could be done on a

limited, often very limited, amount of ground. Back-garden or yard poultry-keeping has been successfully pursued for years, both for meeting household requirements in respect to eggs and for exhibition. A most successful exhibition plant was conducted for years in Islington on a space not much larger than a bed quilt. It is all a question of hygiene, sanitation, and feeding. One of the most striking examples I have met with was in an eastern district of London, where a man, employed in one of the great gasworks, had for years kept half-a-dozen hens on a small space of six by three and a half feet of ground, from which he obtained an average of about a thousand eggs per annum. The floor of the run was deeply bedded with sand, into which grain was dug daily to give exercise, and green food was supplied as far as available. The differences between this and the system now advocated were that a small house was used at one end; that the house was loftier than those now advocated, at least 4 feet high; and that the sides of the run were wire-netted although there was a cover over all. That this was better in every way I have no doubt. There can be no possible benefit in crowding down the roof or lid until the inmates can almost touch it with their combs, thus limiting the total airspace.

There are, however, points which deserve emphasis, and upon which the new poultry-erasers can be freely and fully congratulated and supported. These are, briefly stated: (1) Scrupulous cleanliness, without which any intensive system of poultry-keeping is bound sooner or later to fail. Neglect on that score would be fatal and the present mission will do good if it impresses this fact; (2) using loose sand or dry earth as a floor therein, both for the prevention of disease from manurial action and as a means of giving exercise to the inmates, thus keeping down the tendency to internal fat. Making the birds work for their food is ever a benefit to them, otherwise they become indolent and non-productive; (3) the keeping of dry bran in a hopper always before the birds would appear from such experience as we possess to be highly advantageous. The prophylactic action of bran, as distinct from its food value, which latter is probably small so long as it is in a dry state, has not been fully determined, but it is a striking fact that fowls will consume considerable quantities, and we may, therefore, assume that instinct is a safe guide in this direction, as the palatability of the product is by no means high. What is here stated raises questions which demand careful in-





[Copyright.]

Major Mansfield was instrumental in effecting a great increase of Poultry-Keeping in Bermuda when stationed there, and has been one of the pioneers of the Philo, or as Mr. Meech calls it, the City system in this country, which he believes is the best yet adopted for urban and suburban districts.



vestigation; and (4) the use of sprouted oats, though that is by no means new, gives elements which are necessary to the physical health in a form which is attractive and highly appreciated. It is a moot question whether other green food would not be equally beneficial, but that, again, is a fit subject for experiment and research. One advantage is that oats can be sprouted anywhere, at any season of the year, whereas ordinary green stuff is scarce during the winter, and many town poultry-keepers have no opportunities of growing it, whereas they can always sprout oats. Whilst no one of these is absolutely original, the combination is novel, and it is by way of such combinations that progress is made.

It will be at once evident we have nothing leading to the conclusion that the success of this system is dependent upon the form of house which is advocated either in this country or America. The case already referred to indicates that equal success was obtained years ago with a house and run which were of a different type, and which I cannot but regard as in every way superior, in that the sense of restriction was less and the atmospheric conditions more favourable. The one advantage of the smaller and shallower houses is that the opportunity for the sand or earth becoming wet is reduced. That, however, can be guarded against in other ways should it be an essential, which has yet to be proved. Everyone will realise that where the fowls are all the time on a limited area it must be thoroughly drained, and standing water would be injurious, but with loose sand or earth of sufficient depth and turned over daily that would never be the case. That the present "bird-cage" houses will be the ultimate form is unthinkable. They are merely stepping-stones to something better. Possibly by conservation of heat they conduce to immediate egg-production to some extent, though experience with open-fronted houses is antagonistic to that view, but the ultimate results cannot be good, as shown below. The essential element of air, namely, oxygen, is probably the most important part of the food. Whatever reduces its supply and regular renewal must in the long run be harmful.

Supposing that the "bird-cage" method of poultry-keeping can be carried out successfully, it will be well to inquire what are its scope and limitations, for these are the points which require to be realised by those who advocate and those who adopt them. With the desire to extend production in our great centres of population on the part of such are strictly restricted in their opportunities, all will sympathise most warmly. The doing so must be to the individual as well as the national good. Recurring to the case already mentioned, the six hens kept produced in twelve months nearly a hundredweight

and a quarter for the household of one of the finest articles of food—namely, eggs. Parents and children would thus be made stronger and happier, to say nothing of the pleasure derived from keeping and attending to the hens. There are scores of thousands who might do likewise, and, so long as hygienic conditions are observed and the birds are not a nuisance to neighbours, everything that will encourage extension of the system deserves support and praise. Residents in towns and their suburbs might do much more than at present in this way. It is to these that the system should appeal. The main difficulty will be in obtaining a supply of sand or dry earth for renewal of the scratching material as required.

At the same time it is of supreme importance to recognise the limitations, which are considerable. First and foremost of these is the fact that the conditions are abnormal in the extreme, and that the accumulated tendencies over a series of years will be to reduce the natural vigour of the fowls, and, therefore, their productiveness. It is not what is lost in one or two years, but the result if continued. Statements are being put forward to the contrary, but there is no evidence to justify them, and they are antagonistic to all our experience. In my judgment, therefore, hens reared and kept on "bird-cage" lines should not be used as breeding stock. That they may prove excellent layers cannot be questioned. Such, however, is a totally different proposition. What may be done is to buy a sitting of eggs; or, better still, a batch of day-old chicks, rear them under these intensive methods, and retain the pullets as layers, renewing the stock in this way every year. By this system much may be accomplished. To breed from these pullets year after year will eventuate in disaster. The buying of a dozen chicks will cost no more than would a male bird, and if these are obtained from hens kept naturally the vigour of the race will be maintained, without which all will be in vain. This question is not to be determined by the relative fertility of eggs, but by the virility of the birds. The plan here indicated will avoid all the labour and expense of hatching, whether by natural or artificial means, and to that extent reduce the cost of equipment. We may learn much from experience with other classes of stock. The town dairyman does not breed from his cows. He buys when they have calved, and sells as soon as they are going dry. Such, modified to the extent suggested above, should be applied to poultry-keeping on these intensive lines.

That the system referred to above will be of any service for operations on a wider scale I cannot for one moment believe. The townsman with his back-yard, the suburbanite with his little garden, and the rural cottager with his tiny patch of land, may use it with advantage. But for



others, such as the farmer, the small or allotment holder, who operates on a larger scale, and to whom it is a question of living, partial or entire, there are other methods which involve less capital expenditure for equipment, reduce the labour considerably, and will yield quite as good results. To the former it is nothing more than a utilisation of household scraps that would otherwise be wasted, and of contributing to the domestic food supply. Time and labour are compensated for by the pleasure and satisfaction of the pursuit. They are not regarded or counted in the cost. To the latter, however, these are factors which cannot be ignored. The labour of attending to fowls divided out into half-dozens, of digging over the sand and burying the food daily, of sprouting oats for a large number, would be several times greater than under ordinary methods. Even were it true, which is by no means proved, that a few more eggs were obtained, the cost of production would be enormously enhanced. Pity the man keeping 300 hens in fifty of these "bird-cages" if he had to do this every day, Sunday and week-day alike, from Christmas to Christmas. Life would hardly be worth living, and certainly the

returns would not compensate. It cannot be regarded as a commercial system where labour has to be paid for directly or by the profits, nor is it a means of making a living from poultry-keeping. Where land is available birds will be healthier and more profitable if they are allowed to follow the usual course of nature, with such control as may be given in reason. Therefore, we can come only to one conclusion, namely, that occupiers of land will find success to a greater extent by either the portable house or the colony system, and had better leave this "bird-cage" method severely alone.

One fact which may be commended for consideration is that in no country I have visited were fowls so crowded and yards so small as in America, a country with hundreds of millions of acres of unoccupied land. Probably there has been some improvement since my visit five years ago. At the same time, these ultra-intensive methods appear to have a fascination across the Atlantic, perhaps explainable by the differences in climate. It does not follow that what *may* be done there can be accomplished in the United Kingdom. Therefore, to go slowly is the wiser policy.

## GERMAN POULTRYDOM.

### I.—A RETROSPECT.

By A WELL-KNOWN GERMAN POULTRY-KEEPER.

THE flourishing state of poultry-culture in Germany and the adjacent central European countries is a subject frequently dilated upon by mediæval writers. In those far-distant days the monasteries—the acknowledged centres of educational activity where art and science flourished—were also the strongholds of agricultural advancement in all its branches, comprising the systematic rearing and keeping of poultry of every description. These jolly "friars of orders grey," black or white—no matter what colour their garb—were lovers of all manner of good cheer in season, as evidenced by the records they have left behind them, giving us details of the ordering of their household. We therein find mention of fishponds, of game preserves, of vineyards and hop-gardens, all encompassed within the boundaries of the convent lands. In the water-meadows by the convent mill Milord Abbot's fat bullocks and milch kine are grazing, the sheep are penned in the turnip-fields, there is "pannage for four score hogs" in the oakwood, flocks of geese are busy gleaning on the stubble, ducks of many hues enliven the millpond's unruffled surface, whilst the farmyard resounds

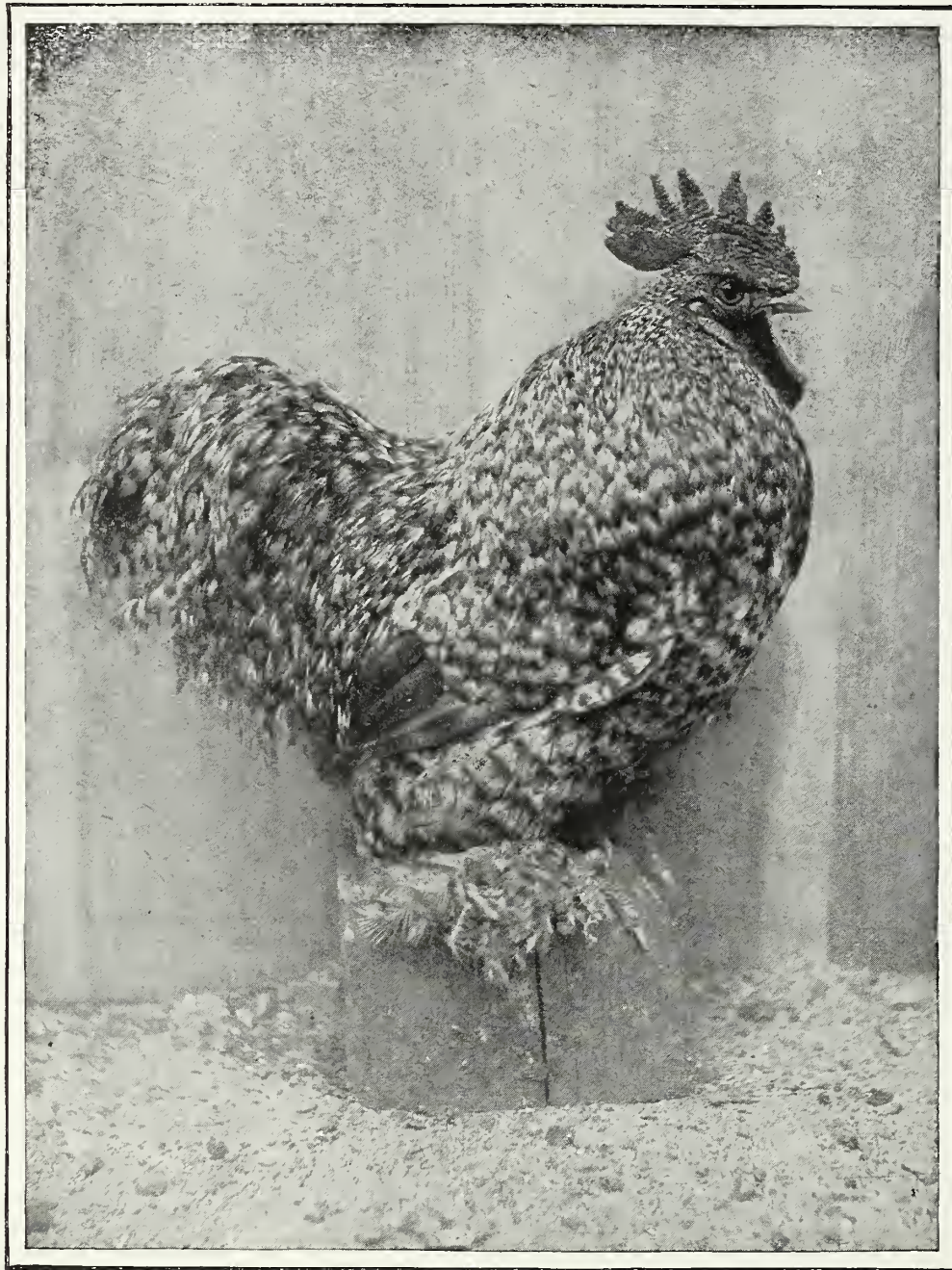
with the crow and cackle of cocks and hens of divers breeds, some renowned as layers, others as flesh producers. Aye, aye! The feathered tribe is well represented both on the convent farm and in the convent kitchen, which receives additional contributions of a like description from the tenants and "villains" who usually pay tithes and dues "in kind," poultry forming an ever-welcome supplement to the daily fare—all of which makes for the further extension of poultrydom.

The advent of the Reformation brought about a great and—in this respect—by no means beneficial change: the dissolution of religious houses, the diminution of fast days and abolition of tithes, all tending towards the discouragement of poultry-keeping. Religious wars then followed in the sixteenth and seventeenth centuries, culminating in that awful thirty years' struggle which deprived Germany of three-fourths of her population, changed fertile plains into deserts, and all but annihilated agriculture, the strongly fortified cities alone surviving and emerging like battered and dismembered islands from amidst the subsiding flood. Small matter for sur-



prise that at the commencement of the eighteenth century poultry culture was virtually non-existent. Nor were the following decades destined to improve matters, fresh war troubles arising through the finally—after a seven years' struggle—successful efforts of Frederick the Great to possess himself of Silesia, whereby the greater portion of the Empire became again em-

waving cornfields are ploughed up by cannon wheels, its homesteads pillaged, its flocks laid under contribution by a foraging and marauding soldiery. How fared the poor scattered remnants of poultrydom in these sad and troubled times? It is recorded that Napoleon would have his "Poulet à la Marengo" when the battle of that name had been fought and won, and in imitation



**A BARRED COCHIN BANTAM.**

*[Copyright.]*

**A Celebrated Winner at many of the Leading German Shows.**

broiled, suffering a repetition of the devastations and privations of a hundred years before. A short period of rest, a respite to the gentle arts of peace, and the genius of Napoleon arises, planning and well-nigh achieving the conquest of a continent. Again long-suffering Germany becomes the battle-ground of nations, again its

of their lord and master were the French marshals and generals—nay, even the meanest private of "la grande armée"—enthusiastically devoted to the scientific treatment of poultry—in the pot! We can therefore well believe contemporary writers who assure us that after the passage of these victorious battalions "not a



by the late Louis Vander-Snickt and M. Charles Buis, to take up these diminutive races. A society was formed, the "Club Avicole du Barbu Nain," the success of which has been phenomenal. Birds were found here and there, first the beautiful Millefleurs, and afterwards the wonderful Porcelaine, though then in undeveloped condition, perhaps one of the most beautiful plumaged fowls ever seen. The perfecting of these birds has been the work of years, in which skilful breeding has united with the highest artistic taste on the part of M. Van Gelder, who has devoted himself to it with an assiduity and enthusiasm beyond all praise. In this he was aided by many others, but his leadership was fitly recognised in 1909, when an album was presented to him signed by all the club members and the leading Belgian poultry-breeders. Progress was ever kept in view, and efforts put forth to secure additional varieties. As a result came the Cailles (Quails), the Whites, the Buffs, and the Blues, together with the Caillontés, information respecting which was given by M. Van Gelder in our last issue.

An account of the Barbu Nain Club was given in our columns for August, 1909 (No. II., Vol. I., page 693), from a pen no longer at our service. What that body has done, led by its president, cannot be repeated, but it is indeed remarkable. Now it has crossed the Channel we may anticipate that the circle of its influence will be widened. An estimate has been published as to the results achieved, showing that in the fourteen years before it was formed the number of Barbus Nains exhibited were 610; in the six years of its operations (1904-1910) no fewer than 6,890 have appeared. The exhibitors have grown from 84 to 961, and the birds kept from 2,300 to 38,900.

The combination in M. Van Gelder of wealth, business acumen, breeding skill, and artistic taste is not often met with. With these he has, also, unbounded enthusiasm, as any one can see who visits his lovely residence. A photograph of some of the poultry pens was given in the POULTRY RECORD of May, 1910 (Vol. II., No. 8, page 407). He is now engaged in writing a complete monograph of the Barbus, with description of every variety, the manner of their breeding and the methods of housing and management found most successful. The book will be another added to the many services he has rendered, and it will be looked for with great interest.

## M. ROBERT E. PAUWELS, D.Sc.

**I**F fanciers are born and not made that is true with M. Robert Pauwels, who, in spite of the fact that his love of poultry and live stock generally was not shared by his family, demanded when only five years old that Father Christmas should bring him lots of fowls and birds. That was more than thirty years ago, and the love has grown ever since. In our issue of May, 1910 (No. 8, Vol. II., page 404), we gave some pictures of his beautiful place at Everburg, about a dozen miles from Brussels. Evidently, however, there is something avian in the atmosphere at Uccle, for there he was born in 1875.

When a student in Germany, where he took the degree of Doctor of Science, he went in ardently for

pigeons, renting lofts and monopolising the garden of the town house where he lived for poultry, Polish then being his favourites. After leaving college he came to London and was engaged in the City, and he diligently attended various shows. Later he resided



M. R. E. PAUWELS.

at Barnes, keeping Schipperke dogs and Malines fowls, with which he was very successful. His father's death recalling him to Belgium, he ultimately settled at Everburg, giving play to his tastes. There he has created a wonderful establishment, beautiful in the extreme, with aviaries, winter garden, kennels, poultry-houses, and pigeon-lofts. It is, indeed, a remarkable sight. Anything alive appears to be attractive, and he has been successful at exhibitions of all sorts from horses—his bays have never been beaten—to cage birds. We have never seen its equal for completeness, variety, and perfection of detail in any country. He was the founder of the Belgian Goat Society, and has also been President of the Ornithological Society of that country. It is interesting to note that, excepting in the stables and garage, all his leading men are English.

In poultry he has always been particularly interested, specially attracted to peculiar breeds, such as Tailness (of which he has originated several varieties, some of which have been illustrated in our pages), Whiskered and Frizzled fowls. He has ever kept in view the object of repressing, by means of domestic fowl plumage, feathers, and skins, the ridiculous and barbarous practice of slaughter of rare and beautiful wild birds.

As already mentioned, Everburg is unique. Here are represented French, English, Dutch, Japanese, rock and winter gardens, with glasshouses. The aviaries number in all forty-one, and his collections of pigeons and cage birds are surprising. There are sixty poultry runs and a great range of rabbit-houses. In fact, the place is more than a menagerie; it tells of great skill in breeding and organisation, with a tendency in many directions to the abnormal.

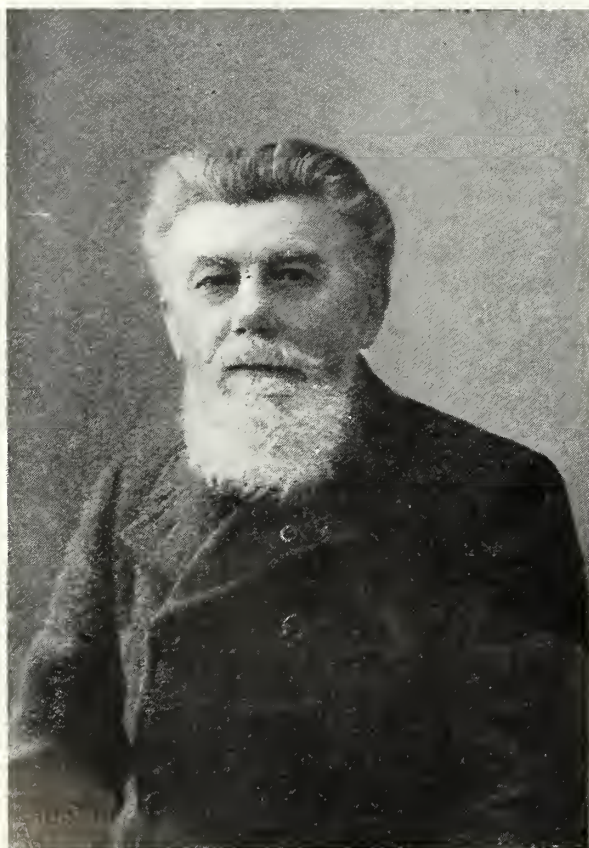


## LOUIS VANDER-SNICKT.

## AN APPRECIATION.

By EDWARD BROWN. F.L.S.

THE passing of a great man is ever an event which causes sorrow, not alone to those who knew him personally but to multitudes of others whose acquaintance was restricted to knowledge of his work. It is not too much to give the designation "great" to Louis Vander-Snickt, who died at Brussels on October 20. The more I have known of him the deeper has been the appreciation of his remarkable knowledge of questions relating to natural history, abstract and applied. It has never been my privilege to meet him during the last thirty years, and there have been many occasions for close personal intercourse, as well as frequent communications, without learning something worth knowing from him. There seemed to be no limit to his observations within the term already used. Fowls and fish, ducks and dogs, cage birds and cats, rabbits and rodents, he was equally familiar with, and of nearly all he was a judge whose decisions were ever respected. My note books contain many points mentioned during our seasons of meeting, which have been most helpful, and are to me valuable indeed. Many others can bear a like testimony. His knowledge was not merely immediate, or concerned with



THE LATE MR. VANDER-SNICKT.

present-day production, though with that he seemed to be familiar all round, but he was charged with history and lore to a degree which has often awakened my admiration. He was, in fact, within his special province, the most remarkable man I have ever met,

original in thought, far seeing in outlook, and a very encyclopædia of information. His friendship was a source of pleasure and inspiration.

As there were given in the POULTRY RECORD some time ago (\*) a brief sketch, with portrait, of M. Louis Vander-Snickt, it is not my purpose to repeat what was there stated, but to pay a last tribute of regard and respect to one for whom I feel a deep and abiding sorrow that we shall meet no more on this plane. It has been known for some time that he has been in delicate health. Two years ago he told me that he feared the winter and did not think he would live through it, owing to severe chest troubles. Last winter he spent on the Riviera, and greatly benefited thereby, but, as stated by him, it could only be temporary. He was determined to work to the last, and I fear in later years he has not taken or had the opportunity of that care necessary for a man of his years.

The point which always impressed me most powerfully was the essentially practical manner in which he judged everything, and the way in which he had probed into the hidden meaning of things. Nothing was too minute for his consideration. Points which would have escaped the attention of others were seized upon, for he realised that often these are of supreme importance. He often said that Nature seldom created anything without a reason or for a purpose. Therefore such questions as colour of the bean on a duck's bill was not regarded as a sport, but revealing something which he wanted to know, and which might be of great value in breeding. Yet, withal, he was humble in the extreme, a true student. There was nothing of the dogmatist. Again and again has he said that he felt a mere child in approaching the problems around. Nor was this affectation. He could listen patiently for hours in order to gain some new light. A Fleming himself he had the firmest belief in the knowledge of breeding and production of the Flemish people, for which there was abundant justification. For centuries they have studied these questions, putting them into practice of daily life. There is probably no race of people who for centuries have done so much in these directions. Unfortunately, they are secretive to a degree, not at all ready to impart to others what they know. From this somewhat unpromising mine Louis Vander-Snickt has dug out much that is of value. Only one of the people themselves could do so. If a Flemish peasant stated that anything was the case, so great was his respect for their knowledge that he accepted it, almost without question. Yet this racial patriotism did not blind him to what might be seen and learnt elsewhere. I well remember the excitement with which he called my attention to the Orloff fowls at St. Petersburg in 1899, describing the red variety as the most marvelously burnished-plumage fowl he had ever seen. In spite of this willingness to appreciate what might be found elsewhere, probably everything Belgian was in his judgment the supreme of all. He was ever delighted to give his time to showing visitors what is to be seen in his native land, and there is much more there than has been told. On many occasions has this been my privilege, as well as others who have carried letters of introduction. The last time was nearly two years ago when he freely spent nearly a

\* Vol. I., No. 2, page 91 (November, 1908).—EDITOR.



month in taking me around when I was preparing the "Report on the Poultry Industry in Belgium." The help then given can never be adequately acknowledged.

If M. Vander-Snickt had any strong feeling in respect to poultry questions, these were in his antagonisms to methods adopted by fanciers, whom he condemned, often, in my judgment, far beyond their deserts. Some of his animadversions with respect to

them he felt deeply. Loss of his wife a few years ago was a heavy blow, and financial difficulties tried him sorely, especially the surrender of that independence which he had valued so highly. In all he remained as young in spirit, as keen in observation, as earnest in purpose, as hopeful as one half his years.

Nearly six years ago I suggested to a Belgian gentleman that efforts should be made to secure him a competency, and enable him during the years left to

him to devote himself to placing upon permanent record his great and varied store of knowledge, much of which will be lost to the world, I fear. So far as I know nothing was done in that direction to my deep regret. What should be attempted is to bring into one focus the cream of his writings in each branch of knowledge dealt with, for, in that way, some at least may be saved for the enrichment of breeders everywhere. That were a task worthy the labours of anyone. Did time permit, and my knowledge of French were sufficient, I should have gladly done this in memory of my old friend, but that must be the task, as it is the opportunity, of another.

To Louis Vander-Snickt I pay this sincere but inadequate tribute of respect in memory of the work he has done, and the

privilege of being regarded as his friend.



MR. VANDER-SNICKT IS ON THE RIGHT.

[Copyright.]

the way in which Belgian fanciers have introduced alien breeds showed how great was his faith in the native races, and he did not hesitate to condemn strongly the way in which the Campine is being modified by English fanciers. Yet, at the same time, he was essentially a fancier in many directions, and beauty always appealed to him. What, however, he chiefly objected to were arbitrary changes regardless of the effect upon the essential qualities. He feared the result of English and American fanciers taking up Belgian races.

One advantage which an educated man has in a country like Belgium is that he must be a linguist, for there two, if not three, languages enter into daily use. In this respect he was remarkable indeed. How many tongues he could read and speak I do not know—five certainly, probably more. On one of our Continental journeys, recognising our usual English linguistic deficiencies, I lamented the difficulty of getting about. He quietly said that if he were a month in the country referred to he could make his way, and I have no doubt whatever such would have been the case. His travels had covered nearly the whole of Europe, and he was a frequent visitor to England. Some of those who first met him at the Poultry Conferences in 1899 and 1907 have often said how greatly they were impressed by him.

My friend's later years have been clouded by many sorrows and disappointments. About the latter I never encouraged him to speak, for respecting some of

## THE NEW POULTRY ACT.

POULTRY ACT, 1911.

(1 & 2 Geo. 5, c. 11.)—18th August, 1911.

THE object of this Act is to enable Orders to be made under the Diseases of Animals Act, 1894 to 1909, for protecting live poultry from unnecessary suffering while being conveyed by land or water, and in connection with their exposure for sale and their disposal after sale, and for requiring the cleansing or disinfection of receptacles or vehicles used for the conveyance of live poultry. Power is given to an inspector, for the purpose of enforcing an Order under the Act, to examine any live poultry under any circumstances to which the Order relates and any receptacle or vehicle used for their conveyance, and to enter any vessel or premises in which he has reasonable grounds for supposing that there are live poultry in course of conveyance or packed for conveyance. The expression "poultry" includes domestic fowls, turkeys, geese, ducks, guinea-fowls, and pigeons.

### Long Island Ducks

An estimate is made that in the Eastport district of Long Island, which is seventy-two miles from New York, between 300,000 to 400,000 young ducks are marked annually. One breeder, Mr. A. J. Hallock, hatched 92,000 in 1910.



## PETALUMA, CALIFORNIA.

## A GREAT POULTRY CENTRE.

By A. T. JOHNSON.

ONE hot day last summer, with the memories of five hundred miles of dusty road at my back, with the prospect of as many to come, ere I concluded a camping itinerary in a buggy through the by-ways of California, I came upon the town of Petaluma, which lies among the sun-burned hills a day's journey north of San Francisco. I had taken a rather circuitous route with the main object of making a pilgrimage to Petaluma and of seeing something of that great poultry-keeping district of which that town is the centre.

One does not live long in America without being aware of the fact that there is always a surprise awaiting you round the next corner. This was to me of

I am not sure whether my faithful old steed had an instinctive partiality for fanciers, or whether some other and less worthy motive induced her to stop whenever a welcome sign-post appeared in view. But, at any rate, if she was sometimes wanting in discrimination (she once came to a halt at the entrance to a cemetery where plots were offered at prices tempting to any who speculated in the future) she pulled up with a jerk at a gate which bore the legend "Vincent G. Huntly, breeder and exhibitor of pure-bred poultry." Although I had never known Mr. Huntly intimately he was so familiar by repute and his name revived so many recollections of the great shows of ten or more years ago and the fine stock which ever came out of the Trowbridge yards, that in a few minutes I was on the doorstep of his bungalow. And, without infringing upon the decencies of modesty, I think I may say that the joy of our meeting was mutual. But only the wanderer in a



AT PETALUMA, CALIFORNIA.

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material aid in stimulating that zest for travel which, keen as it was in the freshness of morning, often flagged in the torrid hour of noon. True that surprise often came to me as a spectre of disappointment to cast down the shadow of depression upon a tour that, to my no little anxiety, bade fair to become immortal. But I approached the "great poultry belt" of the Pacific coast with an open mind. I was prepared to find it all that it is said to be by the patriots of the West, and determined to be no less resigned if I should happen to discover that it was no more than a wisp of the imagination. As a matter of fact it was neither one nor the other. But the ever faithful surprise was there nevertheless, for no sooner had my "one-horse chaise" mounted the weary hills which flank Tamalpais, no sooner had I come in sight of the flocks of White Leghorns dappling the hillsides like remnants of departing snow on a Yorkshire wold than I fell among friends.

strange land knows what it is to meet a kindred spirit, only they who for years have cast their lot in a far country can properly appreciate the warmth with which old incidents are recalled, old memories revived by that sympathetic link of brotherhood common to fanciers all the world over.

When he came to Petaluma Mr. Huntly was appointed manager of the Poultry Experimental Farm of the State of California, a position which he still holds, and one in which, with the help of his wife (also a native of the good old West Country) he has earned much deserving distinction and popularity from all classes of poultry-keepers in the district and beyond. But although it was less of him—"the man on the spot"—and more of Petaluma that I intended here to write I find, as I did at the end of that summer day, that, while the subject of the "poultry belt" got but scanty attention, our conversation had an uncommonly persistent way of returning to the



old days at home. To the days of Henry Digby, of "Joe" Partington, Enoch Hutton, and others (and how the scroll widens with the drift of years!). Half forgotten, yet how easily refreshed, were the memories of incidents that came between us and the chicken industry of the Pacific slope in whose very centre we were talking. And now that I come to dwell upon it I think that if I had been sent to "interview" Petaluma I would have to try to crave excuse to my editor for the personal nature of the "copy" by admitting that I had been "side-tracked" and seduced, lock, stock, and barrel, by the generous hospitality of my host and hostess, which would, after all, be no more than the truth. As a matter of fact, my only regret now is that of a number of photographs taken of Mr. Huntly's farm and stock practically all were accidentally ruined.

As they are throughout the Western States, about ninety-nine per cent. of the poultry at Petaluma are White Leghorns. White eggs being preferred, this breed appears to satisfy in that respect, but I have yet to be convinced that Leghorns are the best for the "broiler" and "fryer" market, especially as nearly all the strains are so very small. And from what I saw and heard the eggs laid by this small type of Leghorn were not of a size that would command for them much attention at Leadenhall, not to mention an English laying competition. And the average pro-

would appear to be a very living exception to the rule that "a prophet is not without honour, save in his own country."

Perhaps the greatest difficulty which the poultry-keeper has to contend with in the far West is the lack of green food. For six months of the year the pastures and hill-sides are as dry as parchment and the colour of chamois-leather, save on land where irrigation is practised and there it is not always practicable to run the fowls, even supposing there to be none of that stupid pig-headed prejudice against them, which there is and which we know so well at home. But Mr. Huntly, in laying out the runs at the State Farm, kept this question in view, and has so arranged his pens that some of them are always being cropped. Water is conducted to all runs by pipes, and among the many other vegetables grown on the land enriched by the stock, Swiss chard and alfalfa are prime favourites. The former is a fast grower, it is juicy, and always crisp, and thus especially good for young chickens. That a great many poultry-keepers all over California have profited by following the State demonstrator's practice regarding this matter is obvious. But it is equally obvious that there are still many to be convinced—as there are in England—of the importance of this subject. The fast-growing eucalyptus, blue and red, together with fruit trees are planted in the passages and pens for shade purposes,



EUCALYPTUS ("BLUE GUM") PLANTED FOR SHADE AND SHELTER FROM WIND.  
[Copyright.]

duction per hen would not be considered satisfactory in hens kept under the same circumstances at home. Though Mr. Huntly has never ceased to push home the value of selection, the trap-nest is not in use on the State Farm, at least it was not at the time of my visit. Instead, the Hogan system is largely employed and found of practical value. Indeed, if there ever were any trap-nests at Petaluma, Mr. Hogan has supplanted them and, being a resident of that town, he

though both, of course, have their own commercial value, and serve a double purpose.

In a country like California, or rather that part of it in which Petaluma lies, the roosting-house need not be a very elaborate affair. I have seen some for summer use made entirely of wire fly-gauze, save the frame and roof, and am assured they acted splendidly. They look like sublimated meat safes! A great number are as shown in the accompanying pho-



tographs. Even for England such houses would, of course, be too stuffy and ill-ventilated for general use, but many Californians put their stock in them and then wonder why catarrhal diseases are so prevalent—in a fine dry climate noted for its beneficial effect upon “lungy” ailments. But with all its wonderful faculty for pushing ahead, with its electrical energy and inventive genius, America is still, in some respects, more behindhand than we are in conservative England. Faith in the peppercorn still exists in rural places. I have been assured by an otherwise intelligent ranchman that “Biddy” is still superior to the incubator and brooder as hatcher and rearer, and that “ducking” her is the best method of “curing” broodiness! But this is only an example of America’s many curious contrasts.

In the photographs which accompany this article it will also be seen that a large number of layers are run together, but, while that is by no means the usual principle, the comparatively small space often allowed to the flocks is a constant surprise to the stranger who knows anything of the subject. Still, one cannot always make comparisons between poultry-keeping in California and in England for, the climate of the former being so dry, a far greater number of fowls can be run in health and with profit on a given space than would be possible under our rainy skies. On the Pacific slope one may often see an acre of suitable land permanently occupied by four, five, or six hundred healthy layers, the explanation being that the soil is nearly always dust dry and that great deodoriser—the sun—is ever present. To the English poultry-keeper the lesson is there nevertheless. And because of the above fact and that the temperature so seldom varies beyond the normal a greater number of chickens can be brought up together in one brooder than would be possible in a humid, changeable climate. At Mr. Huntly’s place, for example, there were eight hundred Leghorn chickens about a month old in one brooder house and all in one “bunch”—an example I would not care to follow anywhere but in a sub-tropical climate. But it is not only the latter and its gravelly, well-drained soil and navigable river that have helped to make Petaluma the centre of the Western poultry industry. Organisation and combination, the natural outcome of a special industry focussed to one spot, have been instrumental in fostering the growth of a business which aptly celebrated its birth by the invention and manufacture of the well-known incubator which still bears the name of Petaluma. Then there is the proximity to San Francisco and its rapidly increasing suburbs—if Oakland, Berkeley, and the others will pardon my use of the term. But in spite of the fact that Petaluma in 1910 produced over 84,000,000 eggs, 76,278 dozen market poultry and other poultry products, the Eastern States still annually ship over a million dollars worth of eggs and poultry over three thousand miles to the great Western capital.

I generally try to avoid statistics, but now that I have made a beginning I may as well continue. It has been estimated that there is a population of 1,500,000 hens at Petaluma. The town is a thriving city of 7,000 people, supporting, among other industries, three or four incubator manufactories, a cold storage plant capable of holding 10,000 cases of eggs,

and “the largest chicken hatchery in the world” (what, another?). It is said that the average number of egg cases handled every day at Petaluma work out at about four hundred. Nearly a dozen firms are employed as dealers in poultry and eggs, and it is through their hands that the bulk of the business is done. As I have said, the valleys and the hill-sides for miles are dotted with poultry-yards which may contain any number from half-a-dozen to a thousand birds—many people apparently making an entire living from the business. What this “living” amounts to is not so easy to ascertain, but a general impression appeared to be that large flocks could be induced to return a profit of one dollar per head, which is somewhere about what it would be in the Old Country. But most practical people agree that some other branch of work—such as fruit culture—should be run in combination with the stock, and there was not wanting evidence that they were right. The poultry-farms which bore the most unmistakable signs of prosperity were those which were well capitalised by men who knew their business, those which were of considerable size and which had some such industry as I have mentioned in combination with them.

Apart from the popular White Leghorn, Mr. Huntly runs a long list of breeds at the State Farm. Being club judge to the South Californian Orpington Club, he had, as might be expected, a representative lot of that breed, the blacks being particularly good. His champion cock in this variety would hold his own in a big English show, and I was not surprised to learn that up and down the Pacific coast this bird has won more prizes than any other. The first prize, gold medal and diploma for the best exhibit of pure-bred poultry at the Food and Industrial Exhibition of Petaluma (1911), was won by the State Farm stock. Mr. Huntly also has a fine stud of Aylesbury ducks, but he betrayed unmistakable symptoms of homesickness when speaking of his once-famous Rouens! Though many years and seven thousand miles now lie between him and the old life, he is still English enough to love well-bred stock of all kinds. Those national attributes, a collection of dogs of unmistakably British design, are ever at his heels, while “Dabster,” a promising four-year old colt of his own breeding, is a family friend.

### Miners and Poultry.

*Farm Poultry* says: “Indirectly the mining and lumber (timber) interests of a region, and particularly mining interests, affect poultry culture; for men engaged in these lines of work turn quite naturally to poultry for recreation.” That certainly is the experience in Europe.

### Scalded Chickens.

The practice of scalding poultry before plucking has almost died out in this country. It is of interest to note that recent investigations in America have shown that bacteria develop much more rapidly on a scalded than on a dry picked bird, and that the same is true when wet cooled as compared with dry cooled.



## THE CRYSTAL PALACE SHOW.

By W. W. BROOMHEAD.

THE tenth Grand International Show, held at the Palace on the 14th, 15th, and 16th ult., was, beyond question, the greatest poultry exhibition that has ever taken place in this country. The total number of entries in the open classes, appliances, and Belgian section was exactly 6,262, and this included about half a score of "a" numbers. In the open classes, of which some half-dozen were cancelled, 6,018 entries were made; and, as usual, Orpingtons and Wyandottes accounted for "the lion's share," no less than 1,681 being made in those two breeds alone. Competition throughout was very keen, although, in a few cases, the support was weak; but, generally speaking, the quality was of the best. The much-coveted special prize for the best fowl in the show was awarded to Mr. George H. Procter's champion Buff Cochin hen, which, of course, secured the special for the best hen or pullet. Of the cocks, the best was Mr. O. F. Bates's Golden Wyandotte, with which that well-known fancier had the pleasure of winning the Wyandotte trophy outright. The second best cock was Mr. H. Ainscough's Black Red Modern Game Bantam cockerel, the third best, Messrs. W. and J. H. Heys's Spangled Old Egyptian Game, and the fourth, Mr. J. Brennand's Silver Grey Dorking cockerel. Mr. J. Dawson's Wheaten Old English Game Bantam pullet was awarded the special for the second best hen in the show, Mr. T. W. Gibson's Barred Plymouth Rock that for the third best, and Mr. J. D. G. Hutchinson's Andalusian pullet the special for the fourth best hen.

Turning to the birds, there was a nice entry in the six classes for breeding-pens, and the winners of first prizes in these were Mrs. Wilkinson (Buff Orpingtons), Miss Carey (White Orpingtons), Mr. C. N. Goode (White Wyandottes), Mr. C. Aitkenhead (Dark Dorkings), Mr. C. E. Pickles (Black Hamburgs), and Mr. G. H. Procter (Buff Cochins). The Dorking Club Show was nicely patronised, and some really good quality specimens were shown in the novice classes. Cochins were not very numerous, but the birds were of the best, Buffs and Whites being especially attractive. The Brahma Club Show was up to last year's entry. Dark hens and pullets were a fine lot, while there were some really charming Lights on view. Langshans have never been better, though numbers may have been greater. The young birds were in particularly grand lustre, but the adults, as a whole, were hardly up after their moult. Blues were a great improvement on last year's show. Croad Langshans are "going strong," and no doubt about it; and there has surely never been a better display than that at the club show last month. A little more colour—that beetle-green sheen seen on most black varieties of other breeds—and the Croad will have reached its top peg for the show-pen.

It was a veritable "combined specialist clubs' show" for Orpingtons this year at the Palace, since the only variety that was not a club show had its class guaranteed by the Red Orpington Club. The entries of Blacks were more numerous than at last year's club show. The old birds were rather back-

ward in their feathering, but better cockerels and pullets have never been penned. Buffs were well in advance of last year's total at Sheffield, and the section was a great one in all ways. Whites were forward in splendid numbers, and the same may be said of the quality. Jubilees and Spangles are practically marking time. Each variety has a club to itself, in addition to the Variety Orpington Club, but there has been a lack of vigour this past season. Blues are coming ahead in a splendid manner, and the variety is likely to boom in 1912. The winning pullet (from Captain Max de Bathe) secured the special over the Blacks, Whites, and other varieties (except Buff). Cuckoos were disappointing, there were few, if any, genuine Cuckoo birds on view, and it would be much better to rename the variety the Barred and breed to that stamp of marking and colour. The Red has been boomed of late, but in the class of eleven there was only one true Red fowl, and that a really fine cockerel, shown by Mr. W. Holmes Hunt—it is a genuine Orpington and a true Red, and we congratulate Mr. Hunt on his achievement.

The United Wyandotte Club Show was a fine display. The Laced varieties, and particularly the Golds, were of splendid quality. Whites were never better in type and colour, and, despite some of the "croakers' comments" concerning size, they are "it" as regards a Wyandotte. Blacks, Blues, and Buffs, Columbians and Partridges, too, all were good, and the club show was truly a collection worth looking at more than once. There are some novices in the Wyandotte fancy, and they supported their club in a loyal manner. Plymouth Rocks hold their own well; Barred were forward in good numbers, and the quality of the Whites and Blacks was of the best. The Buff Plymouth Rock Club Show has been better supported. Leghorns (the club show), on the whole, made a grand display, and entries generally were satisfactory. There was a good turn-out of Andalusians, although the quality has been higher at the Palace. Throughout the Minorca Club Show the entries were very strong, and seldom have better birds been on view. Two good classes composed the Rosecomb Minorca Club Show, and this sub-variety appears to be making nice headway.

The Sussex Club Show was a good one, and the breed continues to hold its own; perhaps the Light does not show much improvement, but to get clear, silvery body colour and brightly-striped neck hackles is a difficult thing. There were four well-filled classes in the Houdan Club Show, and quality was nicely maintained. Malines came up well, while La Bresse were fairly numerous. Faverolles could not have been better, but Whites were rather poor entries. Some really high-class Hamburgs turned up, and two or three noted teams were entered. Anconas were forward in splendid numbers at the club show, and those who have been saying that the breed is on the down grade will have to change their tune; novices supported the event in a splendid manner. In the Campine Club Show improvement was noticeable all round, and the inclusion of a class for Golds was an innovation that was fully justified. Rhode Island Reds were much better than at the Dairy. The entries of Indian Game, Black Sumatra Game, Aseel, and Malays were well up to the usual. Modern Game were hardly as numerous as formerly, though the



quality was high, and Old English Game were very good all round.

The "odd" breeds, such as Rosecomb Black Leghorns, Scotch Greys, Bakies or Dumpies, Spangled Wyandottes, and Brown Sussex were representative. Only two classes were provided for the Yokohama Club Show, but they were nicely filled. An Apteryx Feathered Langshan—a Silkie Langshan and by no means rare at one time—was the novelty in the A.O.V. classes. The Silkie Club Show met with fair support, and some rare good birds were shown here. Malay and Game Bantams left nothing to be desired, while in the Variety Bantam Club section with six club shows and several other classes, there was quite another show to go through. Waterfowl and turkeys were good, but it was a pity that classes for White Turkeys had to be cancelled once more. However, with the formation of the White Turkey Club there should be a good improvement next season.

### Wise Words from Chicago.

Dr. Warren, of Chicago, expert for the American Medical Association, dealing with the supply of eggs, says: "Eggs, in order to command the highest price, must be produced under sanitary conditions, carefully gathered at least once a day, kept from the glare of sunlight, and be free from excessive heat along the line from producer to consumer. They must be distinctively quality eggs, and when a customer's taste is once educated for good reliable eggs, he will be persistent in asking for them again and again, AND YOUR MARKET WILL GROW WITH YOUR PRODUCT."

### Poultry in New South Wales.

Opinions are to the end that good table-poultry will in the near future fetch very big prices (says the *Sydney Morning Herald*). The quantities received are now every week increasing, but despite this the demand continues excellent, there being keen buyers for all the meaty stuff offered. Young roosters of but medium quality last week fetched up to 7s. 6d. per pair, and Muscovy drakes as high as 9s., old hens of fair quality realising up to 5s. 6d. per couple. Salesmen fear that there will soon be an overwhelming number of small Leghorn cockerels on the market, and consider the prices will suffer accordingly.

### A Street of Chickens.

This refers to Canada, not Somerset. The *Canadian Poultry Review* uses the above in connection with visits to Guelph College, where the poultry work is in charge of Prof. W. R. Graham, who is doing so much to promote poultry-production in Ontario, in which the writer says: "On our last visit we were greatly taken with the appearance of a long, green farm lane, in which were placed, on both sides, colony coops of approved form. It was an ideal spot for the raising of chickens on the free range system. Through the fences they had access to cultivated fields on both sides of the lane. If chicks don't grow and thrive under these conditions they don't deserve to live."

## FANCIERS AND FANCY MATTERS.

By WILLIAM W. BROOMHEAD.

*International Standards—The Campine Boom—Blue Leghorns—Specialist Club Changes—Three Recent Shows—Illustrated Standards—Spangled Orpingtons—December Events.*

### INTERNATIONAL STANDARDS.

I see that the question of having international standards for what may be termed the fancy breeds of poultry is still exercising the minds of some fanciers in this country. The idea is not a new one by any means, and it has often been discussed in America and over here, but, so far, nothing has come of it. Some years ago, when Mr. Grant M. Curtis was in England, we went through the poultry section of one of the "Royal" Shows, during the time it was held at Park Royal, and the difference he noticed between a few breeds going by the same name in both countries led us to discuss, at some length, the question of international standards. Mr. Curtis was of opinion that the fanciers of the country in which the breeds originated should fix the standards, and that those standards and no others should be recognised throughout the world. Thus, for example, the American standards should hold good for Plymouth Rocks, Wyandottes, and so forth, the English standards for Dorkings, Orpingtons, and the like, and so on. This, on the face of it, appeared most feasible; but there would be trouble, I feared, when it came to Minorcas, Leghorns, Andalusians, and other breeds, originated on the Continent and improved (?) by fanciers in this country, as well as by those in America. In a recent letter on the subject that the Rev. E. Lewis Jones wrote to a contemporary, he says the first question to decide is, "Is it desirable to have international standards?"; and he ventures to submit that theoretically, at any rate, it is desirable. "Standards come into being and exist by common consent of the breeders," he rightly states, and adds that an international standard will never be possible until a majority of the breeders in both countries agree to a common standard. The whole crux of the matter is whether an international standard is feasible. Here, naturally enough, opinions will differ, but since Mr. Jones means to bring the subject again before the Poultry Club Council we have not heard the last of it.

### THE CAMPINE BOOM.

From all accounts, there is likely to be a big boom in Campines in America in the very near future. Already a provisional club has been formed in the United States, with the following as the Committee of Organisation: George Urban, Jun., of Buffalo, N.Y., chairman *pro tem.*; Fred L. Kimmey, of Margan Park, Ill.; Madame A. F. Van Schelle, of Brussels, Belgium; J. Fred N. Kennedy, of Toronto, Canada; and M. R. Jacobus, of Ridgefield, N.J., as secretary *pro tem.* The inaugural meeting of the club is to be held at the great Madison Square Gardens (New York) Show, on Thursday, 21st inst., when a permanent organisation is to be formed and officers elected. It is also expected that the genial and popular hon. secretary of the British Campine Club will attend the meeting; and, as Mr. Jacobus



remarks, "a splendid opportunity will thus be afforded for all interested in Campines to hear the best living authority on Campines talk on this grand breed." For competition among members who have paid their subscriptions for 1912 the club is offering several special prizes, the chief of which is a sterling silver challenge cup value fifty dollars, for the best display of American-bred Silvers, while for foreign or American-bred birds a twenty-dollar gold piece will be given to the best display of the breed, both varieties being eligible for competition. The five classes for Silvers will also have twenty-five dollars in cash divided among them; and all these special prizes will be awarded in addition to the regular premiums offered by the New York Show management. The Silver Campine has been gaining steadily in popularity among English fanciers during the past few years, and the club has now a strong list of members. At Reading Show, at which I judged last month, I came across a remarkably good cockerel, so good, as a matter of fact, that I awarded it the special for the best fowl in the show, and over very representative specimens of most of the popular breeds.

#### BLUE LEGHORNS.

At the recent meeting of the Blue Leghorn Club, held at Manchester, the chief discussion centred around the colour of the cockerels, since the present standard does not appear to meet the unqualified approval of certain of the members. It was proposed and seconded that the standard colour for cockerels be altered in order to allow the top colour to be of a much darker blue than it is at present, and this proposition, with others, will be included in the agenda for the general meeting to be held at Manchester some time this month (December). The general feeling is that the Blue Leghorn is making rapid strides to popularity and perfection. But, like other breeds of the now fashionable colour, there is plenty of room for improvement. However, as I have previously mentioned in these notes, the Blue fowl without black lacing is a most difficult one to breed, so all credit to those fanciers who are "in" it.

#### SPECIALIST CLUB CHANGES.

I hear that Mr. Clifford Willison, of Bubney, Whitchurch, Salop, was returned unopposed as hon. secretary and treasurer of the Black Leghorn Club in place of Mr. S. Metcalfe. Owing to ill-health, Mrs. Bury has been compelled to resign the hon. secretaryship of the Black Wyandotte Club, and Mr. Kingsley Willett (of the Romans, Southwick, Sussex) has consented to perform the duties of hon. secretary for the remainder of the current year.

#### THREE RECENT SHOWS.

There was a splendid display of poultry at the well-known Northern Zoo in Manchester this season. The entry was quite a good one, the total being 1,954 in the 189 classes; so that, despite the cancelling of some classes for lack of support, the average was well over ten. A feature of this event is that a fancier may exhibit in one section and judge in another, and although this system is not approved by the majority of showgoers, there cannot be the slightest doubt that everything is "clean and above board." The Redcap, the Blue Leghorn, and the Plymouth Rock

Clubs held their annual shows in connection with Manchester. There were twenty-two entries of Redcaps in the two classes; in Blue Leghorns the cock class was cancelled, but the remaining six had a total of seventy-two, of which thirty were from novices; while of Plymouth Rocks there were 327 in the twenty-four classes, the Barred variety turning up in remarkably good numbers, both in the open as well as in the novice classes. The Nottingham Bantam Show, run by a body of enthusiasts who have as their president that well-known fancier Major G. T. Williams, was a great success, the entry for the thirty-four classes being 530. The strongest was that for Old English Game hens, with thirty-seven entries, but the two classes for novices had a total of fifty-three. Mr. J. F. Entwisle, who penned sixteen birds, had quite a field day, with fourteen "in the money," his wins being the silver medal for the best bird in the show, the Poultry Club's Game Bantam challenge cup, special for the best Old English Game Bantam, eight other specials, eleven firsts, two seconds, and a third. The entries special for gentlemen went to the Rev. W. Hurst, M.A., who had entered no less than twenty-seven Japanese, while a similar award for lady exhibitors was won by Mrs. Prideaux, who entered seven Yokohamas. The Poultry Club's Variety Bantam Cup went to Miss K. D. Preston's Silver Sebright cock, while the ladies' silver challenge cup for the best exhibit was awarded to Miss Clare Mellor's Blue Red Old English Game cock. The arrangements for the event were splendidly made, and reflected the greatest credit on Mrs. R. F. Hearnshaw, who made her *début* as a show secretary. The great Game and Bantam Show at Kendal was a huge success, there being a record entry. The figures were as follows: Old English Game, 122; Modern Game, 60; Indian Game, 21; Old English Game Bantams, 113; Modern Game Bantams, 352 (of which there were 120 in the sixth annual show of the Modern Pile Game Bantam Club); Variety Bantams, 166. Prizes to the value of £350 were offered, and there was a really good list of specials given in addition to prize money.

#### ILLUSTRATED STANDARDS.

I have received a most interesting letter on the question of illustrated standards from associate editor Drevenstedt, of the *American Poultry World*. In his remarks he says: "You evidently appreciate the difficulties that beset revision committees and artists when they endeavour to make texts and illustrations. Having edited one standard (1898) and being a member of the revision committee ever since, I fully realise the difficulty of making ideal shape illustrations that will please all breeders. The chief trouble-makers, I find, are some of the specialty breeders who insist on having types of their own illustrated, regardless of the word description of the text." I have not yet had experience with illustrated standards, but, having edited the latest edition of "The Poultry Club Standards" I can imagine what trouble there would be if the club attempted to publish its work in what I consider the "up-to-date" style. But a similar bother is apt to worry the judge who has been selected to "sort them out" at an important show, and more particularly if he should happen to be a club specialist. I have "gone through the mill" in that direction.



## SPANGLED ORPINGTONS.

Although the Spangled Orpington has been kept well to the front under the wing of the Variety Orpington Club, the variety has not made that advance it was anticipated it would do when, some two or three years since, the Spangled Orpington Club was formed. It made something of a spurt at the outset, but of late its interests have been greatly neglected, and not even the most ardent supporter of the Spangle will deny this. However, now that changes have been made, it looks as though the variety will get another boom. Mrs. Ada de Bathe (of Hartley Court, Reading) was elected hon. secretary at last month's general meeting. Arrangements have been made to hold the club show somewhere in the South this month, and Mr. Arthur C. Gilbert has been elected to judge.

## DECEMBER EVENTS.

The year promises to finish well, and at the time of going to press with the December issue of THE ILLUSTRATED POULTRY RECORD about forty shows were fixed. The month opens with Galston (Ayr), Cupar (Fife), and Kingswood (Bristol), 2nd; Llanelly (County Society), 5th; Tonbridge (Kent), Dublin, and Leeds, 5th and 6th. At the Irish show there are eighty-five classes for poultry, while at Leeds the number is 192. This latter will be a club meet, since the specialist clubs holding their annual shows at Leeds are the Old English Game, the Ham-burgh, the Faverolles, the Brown, the White, and the Black Leghorns, the Andalusian, the Blue Langshan, the White Orpington, the Columbian and the Blue Wyandottes, the Langshan (Society), and the Plymouth Rock (Society). This Yorkshire event has been referred to in a contemporary as a "Combined Specialist Clubs' Show" on a small scale; but it is not so, since other classes that are scheduled, although possibly guaranteed by specialist clubs, are not their annual fixtures. Clashing with Leeds, there will be Tavistock (Devon) on the 6th and Southampton (Hants) 6th and 7th. The Smithfield Table-Poultry Show will also be held on these latter days, and since it schedules classes for pure breeds (Dorkings, Old English Game, Indian Game, Langshans, Black and Buff Orpingtons, Plymouth Rocks, Wyandottes, and Any Other Variety, as well as Aylesbury and Any Other Variety Ducks, Geese, and Turkeys), it offers an excellent opening for the fancier who combines utility with his exhibition stock. On the 7th inst. the South Metropolitan Fanciers' Association will hold its show at the Camberwell Baths, and in conjunction with it there will be the annual meet of the London Minorca and the Jubilee Orpington Clubs. Swansea will also have a show on the 7th; Neathead (Cumberland), 8th; Smethwick, Broomhill (Northumberland), Rawten-stall, Barrhead, Cleator Moor (Cumberland), and Nuneaton (Warwick), 9th. York will take place on the 12th, 13th, and 14th, and there are 169 classes scheduled, including the shows of the British Minorca, the Leghorn, Plymouth Rock, and Andalusian Clubs. On the 13th, among other events, there will be the Old English Game Club Show at Oxford, and the recently-formed White Plymouth Rock Club will hold its show at Stirchley. The Malay Breeders' Association's third annual club show is announced for Devonport on the 13th and 14th.

## PREVENTION OF PARASITES IN POULTRY.

## SOME "MYSTERIOUS" CAUSES OF DISEASE.

By J. H. CRABTREE.

THE value of healthy poultry cannot be over-rated; and it is unfortunate that so many poultry die off year by year from causes which are set down as "mysterious." Poultry fanciers and breeders are often at their wits' end to discover the reason for deterioration in their birds. The food is good; the run is ample; the roost is clean; and much time is given daily to the care of the fowls. Yet disease stalks in their midst and carries off highly-prized birds.



DOCOPHORUS LOUSE, from a Fowl. [Copyright.]

The real secret is not in the roost or the run. The birds will probably be found on close examination, to be the hosts of a myriad of hungering parasites which so pester them that life is absolutely intolerable. Not only are they inconvenienced and made to feel uncomfortable; they have no peace, day or night, and fall victims to incessant attacks which weaken their stamina and induce incurable disease.



## THE HEN-FLEA.

Of all the parasites which feed on poultry the most numerous and persistent are the fleas. These ravenous blood-suckers seize every available opportunity of attacking their hosts. An army of a hundred fleas will storm a single bird, and, while she is trying to dislodge a colony from under one wing, another bevy will be crawling between the neck and tail.

The hen-flea (*pulex gallinæ*) must not be confounded with the human flea (*pulex irritans*). They are quite distinct. Of the fourteen different types of flea known to us the hen-flea keeps rigidly to his own quarters; and, if when disturbing a nest we should happen to lodge a few on our hands and carry them away, they are doomed to die of inanition. They live on the fowl only, and seldom trouble other birds. Hen-fleas are generally distinguished by a comb-like fringe extending backwards from the first segment of the pro-thorax. The dart from the sharp mandible of the flea is thrust into the flesh of the bird and blood is drawn at every incision. So much so that if we examine the birds affected, and turn back the feathers, we shall have no difficulty in detecting the habitats of the fleas and the wounds inflicted.

Fortunately, the flea gives his host a little hiatus during the daytime. He cares little for the cool, pure air of the fields and the hedgerows. His home is in the dirty hen-roost, the smudgy crevices in walls, ceilings, and floors, and the old sodden hay or straw nest. By day he hides himself in these sanctuaries. Here the female lays her eggs—little nits they are, white in colour, and seldom seen except under very close examination. When fowls are visibly affected with fleas it is well to look carefully at the quills of the feathers for small "broods." Birds sometimes become so overwhelmed with flea colonies that it is impossible to oust them all, and they breed amongst the scurf of the quills.

## LIFE HISTORY OF PULEX.

The eggs hatch in a week, as a rule, or a few days longer if roosts are cooler. The larval flea

of a few inches. They never go far away from the home prepared by the mother-flea. For two to three weeks they grow rapidly to about a quarter of an inch in length. If the roost be warm the larvæ will be full-grown in seven to ten days. Then



GONIOCOTES HOLOGASTER. [Copyright.]



LIPEURUS VARIABILIS. MENOPON PALLIDUM. [Copyright.]

is provided with a miniature horn to pierce the end of the shell when ready to emerge. The snow-white maggots begin to crawl about within an area

they begin the wonderful process of spinning a cocoon. This consists of threads finer than the most delicate silk, and neat as the web of a spider. The cocoon is closely interwoven on all sides, leaving a thin spot where the finishing touches are applied. The skin of the maggot is then shuffled off, and the chrysalid flea lies in its woolly bed inert and apparently lifeless. At first the pupa is soft and creamy in colour, then it hardens to a dull brown. Wings, head, legs, feelers all begin to form within this dusky envelope. A wonderful change is going on. It will take a fortnight to accomplish. At the end of the pupal period there is a tearing away of the bonds; the shell is slit and broken, and out comes the flea, fully developed, ready to plunder and devour after the fashion of his forerunners. As flea multiplication continues throughout the year it is not surprising that a single hen-roost may contain hundreds.

## FORESTALLING THE PEST.

To prevent the onslaught of the flea is much wiser and easier than to cure its effects. He cannot live in unfavourable conditions. Where roosts and



runs are kept scrupulously clean, fleas halt at the very threshold. Cleanliness is the best preventive. It is not, however, always possible to main-

crisp and free from dust. Much better is a nest of wood-shavings with just a sprinkling of powdered lime. The "turpy" smell of shavings will keep a nest remarkably free from parasites. Insect powder is frequently used for the same purpose. Where this is not obtainable, a handful of sawdust, previously mixed with paraffin, may be scattered over the nest.

By keeping out the flea we materially promote the life of the bird.



THE MALE HEN FLEA. *Copyright.*

tain this high standard in poultry-farming; and to stem the pest we must have recourse to other measures.

All roosts and houses should be frequently lime-washed; a moderate quantity of paraffin oil or petrol may be added to the limewash with advantage. This wash will put an end to eggs and larvæ at once, and mother-fleas will "move on." Half a pound of common size may be purchased from the local chemist and added to make the lime-wash adhere better to walls and ceilings. Wash

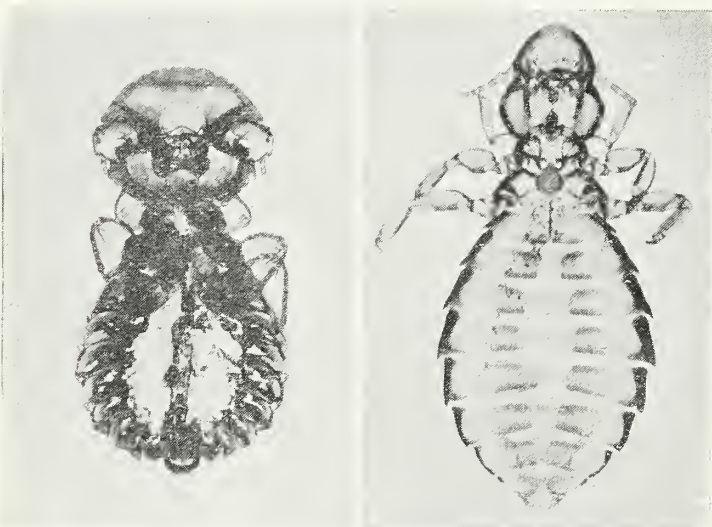
WE hear a lot of talk nowadays about the value of type in a breed, but probably the majority of those who have so much to say on the subject do not really understand the meaning of the word "type." No doubt they consider it a term synonymous with "shape," but this is incorrect, for though type includes shape, shape does not embrace type. Thus we may see a very shapely bird, say a Wyandotte, with white legs or with a leader to its comb that sticks straight out from the head; again you may possess a grand-bodied Orpington, round and broad and deep, but because it has a pearl eye it is not any more typical than was the Wyandotte.

A celebrated American authority on poultry is said to have coined the expression: "Shape makes the breed, colour the variety." If he had substituted the word type for shape, his proposition would have been even more sound. What is type, then? Well, type is a combination of all the characteristics of a breed—comb, face, lobes, shape, legs, and so on. Type embraces them all, and therefore a bird cannot be really typical unless he or she conforms to the standard requirements for each feature, that is to say, conforms more or less, for one does not expect that the standard of ideality can be altogether attained.

Type is the most important feature in keeping a variety pure, far more so than is colour or marking. We may outcross to obtain better spangling or size in our birds, but we must come back again and again to the most typical and purest-bred specimens to keep the shape, legs, and head points right. Yes, and I had almost forgotten something—type includes inward as well as outward qualities. Winter laying powers, early-maturing properties, suitability for the table, are all breed, and not individual, characteristics. Continuing further along this line one may say that a Dorking is not really typical unless it presents a grand deep breast of whitest flesh when served on the table, nor an Orpington hen unless she goes broody in the spring, nor a Wyandotte unless she lays plenty of brown eggs in the winter.

After all, then, if we say that such and such a bird is perfect in type, we *should* mean that it really is an ideal representative of its race, always excepting its colour or markings, which are the only points in a fowl that have absolutely nothing to do with type.

Type must be regarded as the bond or connecting link between fanciers and utilitarians. Let us examine the standard laid down by fanciers for, say, one of the general purpose varieties. The shape that is required in an ideal specimen is one which neces-



GONIODES DISSIMILIS. GONIOCOTES EYNSFORDII. *Copyright.*

generously all crevices, cracks, corners—anywhere, in fact, where dust and dirt are apt to lodge. Some breeders wash floors and perches as well.

It is positively foolish to allow nests to remain for weeks and months unrelaid, hard, and sodden. Such a nest becomes a veritable hot-bed of fleas. If hay or straw only is available this should be



sarily carries with it a well-developed breast and stern (thus indicating a combination of table qualities and winter egg-production); its resemblance, great or small, as the case may be, to the Asiatics means a brown or tinted egg. Comb, shape of head, and even legs have all been chosen originally for some point tending to usefulness.

Size, too, should play an important part in the consideration of whether a particular bird is perfect in type or otherwise. It is true that a good big bird will always beat a good little one, when exhibited, but it is equally true that a definite limit should be fixed for each breed, if possible by weight or height, and that birds exceeding this limit should be penalised to some extent. Hulking specimens of either sex are not desirable in any breed, either from the point of view of gracefulness or utility in the breeding-pen.

It is to be feared that judges do not place sufficient importance upon type, in the true sense of the term, when making their awards. This is a somewhat hackneyed thing to write, but if breeders found that, to win, it was absolutely necessary to produce typical specimens, typical specimens would be the result, and breed characteristics would thereby become fixed and less liable to variation. In other words, fanciers would be obliged to shun the outcrosses they now resort to, especially in certain varieties, in order to produce better colour or marking. It is perhaps the all-round judge who is the greatest offender in respect to the non-recognition of the value of type in exhibits under him, no doubt because he has too much work to do in a given time, but at any rate it is pretty evident that a splendidly-marked bird of a difficult variety, though indifferent, and even lacking, in type, will not only head its class, but also obtain championship honours at the very best shows.

The engagement of several specialist judges at the larger exhibitions has done something towards remedying the matter, and this practice seems, happily, to be growing steadily in favour with most shows of any pretensions in the way of liberal classification, the better class provincial events now engaging as a rule the services of three or four judges where formerly one was deemed sufficient. The exhibiting public can do much, if it has the will, to improve matters by supporting such events as the last mentioned.

Much of the above is perhaps hardly original, or is at any rate open to controversy. It is at all events written in the genuine hope that true breed type will receive more and more attention in the future at the hands of those fanciers who produce and exhibit poultry, and of the gentlemen who are responsible for the placing of award cards.

And now one last dictum—arbitrary, senseless, or sound as it may appear, according to the varying views of those who read it—viz., *That it is not consistent to admit as varieties of the same breed, birds that possess different forms of comb, because one form and one alone must be typical, and therefore all others regarded merely as sports.* The fact that such sports have been recognised officially in the past makes no difference; errors of judgment are constantly being made. No, comb is one of the constituents of breed type, and therefore there can be but one kind of comb in each breed. There, fanciers of rose-combed-single-combed breeds, have I not given you furiously to think?

## SMALL RURAL SHOWS.

By A VILLAGER.

IT seems a great pity that our summer shows of the purely local type should not be in a more prosperous state than they are to-day. They never were strikingly flourishing as institutions, but ten or fifteen years ago they created more enthusiasm, and, I believe, did more good than is the case at the present time. Most of us can remember village shows which have long ago ceased to be, and so great was their collapse in many instances that no one has ever had the courage to suggest the promotion of another in the same district. Bad management, want of knowledge of the proper methods of procedure, petty jealousies between officials, and a too speculative programme—the offspring of an injudicious, often very ignorant, committee—are the rocks upon which these shows are usually wrecked.

There is, of course, the want of money always confronting the executive of a local show; but this, I think, might often be avoided if things were not done, as they often are, in such a hurry, and if the old system of "collecting books" were done away with or revised. I have never met a secretary who was not worried by the apathy of "collectors" who do not collect, and the difficulties of getting the books at the proper time. And even supposing a parish to be fairly delegated in sections to a number of collectors, it almost invariably happens that when, after much delay, the books are eventually got together, there is usually at least a third (to put it at a low computation) of the inhabitants who have never been called upon at all. A much better system to my mind, is to appoint one collector, and let him work on commission, with the understanding that a certain proportion of his percentage would be deducted for every house unvisited by a given date. The committee would then know exactly how it stood regarding the support of the district, and this, the most important of all the features connected with a village show, would be simplified and placed upon a workable basis. Money, of course, is not everything in a village show, but it is a very essential factor, since expenses are always greater than was anticipated, and entry-fees by no means always cover prize-money. Then there is the possibility of "a rainy day," in its most literal sense, when the "gate" is often practically nil.

The question may be asked, in view of all the difficulties and disappointments which beset the path of the philanthropists (for they are often nothing more nor less) who undertake to run a village show, whether the latter is really worth it. There are men and women to be found in every parish who have decided that question long ago by having nothing more to do with such ventures. And, although these are usually the most capable of all, we can seldom wonder at their decisions, seeing that, in very many instances, their time and money have been expended for next to nothing. Lack of *esprit de corps* and enthusiasm on the part of the rank and file (except on the show day, when "Tom, Dick, and Harry," members of the committee, which they have never attended, come to grumble and stir up schisms of discontent) and the casting of all the drudgery upon the shoulders of the willing hacks will in time damp the spirits of the best workers and loosen the bonds of unity that may exist between the few.



But notwithstanding these set-backs and others, there are many of us who cannot help feeling that the village show (of poultry and horticulture combined) is an institution that deserves the greatest encouragement, for when properly conducted it engenders a healthy spirit of emulation among the competitors, it inspires—let us hope—the losers with a determination to do better next time, and it trains the novice in the way he should go. Just as “the child is father to the man,” so the village show should be the nursery wherein those breeders and exhibitors who will one day fill the empty places of those whose work is done first taste the experiences of life.

The only way, perhaps, to get at the bottom of the failure on the part of the village show not only to pay its way but to carry out the worthy “objects” set forth in the rules of the society which conducts it is to go further into the matter of management. And I do not hesitate to say that many a show is wrecked by the professional exhibitor, or big breeder, who is mean enough to swoop down and secure the prizes which were meant for the encouragement of those most in need of them. It is all very well to say that the cottager or small holder would never know what to aim at if he never saw something that was really good. But if that is so, there is no reason why he should be knocked down with it. Personally, I think that argument a wholly unreasonable one, and I know, as a positive fact, that many rural shows have been obliterated by the presence of the “big” exhibitor—whether poultry-keeper or horticulturist—or because the rural exhibitor, or amateur, was not efficiently protected from his rapacious superior. If a committee wants to provide open classes for the crack exhibitor, it should not do so without the consent of the whole society, or at least two-thirds of it, for it is surely grossly unfair, if not something worse, to take the hardly-earned funds (collected for the specified purpose of encouraging local culture) and distribute them to the stranger. I have seen promising little rural shows, which were doing much good, absolutely killed by an overbearing section of the committee, who chose to ignore the very principles which they were elected to observe. The Fancy, as such, has no stauncher supporter than I am, but it can in an indirect manner do much harm in the way I have indicated—not through any fault of its own, but because a few of its representatives sometimes have a way of growing too big for their boots. “Limit” classes have been tried as a means of protection for the small man, or amateur; but in these days, though I regret to say so, there are experienced exhibitors who will enter a bird for a 5s. first prize in a 7s. 6d. or 10s. limit class, and risk its being claimed, even though it may be worth more than limit price and prize put together. But, generally speaking, the fault rests with the committee, who, if it likes, can manage to foster and encourage the culture of stock, animal and vegetable, among the amateurs of the locality without much fear of any intrusion by the deck-sweeper. More thought and study should be given to this part of the schedule than is usually the case, and while I would not for one moment wish to bar purely fancy breeds—for if we have beautiful flowers, why not beautiful poultry?—I would make more of the utility side than is usually done.

Speaking of flower shows in his delightful “Memories,” Dean Hole very wisely says that “there

must be vigilance, as well as vigour and self-denial, in the committee. The trail of the serpent is still among the flowers. The exhibitor is tempted and fails. He wants just one more dish for his collection of fruit, and he begs it or buys it. He has not ‘twenty-four distinct varieties,’ so he puts in another under another name.’ This, we all know, is equally true of the poultry section of the show, and while not many modern exhibitors (even rural amateurs) would make as bold a venture for fame as he who is mentioned below did, a committee cannot be too explicit in framing its rules nor too thorough in seeing them carried out. The incident referred to came under the direct notice of the famous rosarian just quoted, and it deals with a farmer who entered his name as a candidate for a prize to be given for the best three ducks, and who, finding that one of his trio was inferior to the others, substituted in its place a fine young goose! The story of how “the spirit of resentment lingered in the breast” of the disqualified exhibitor, as told (and who could tell it better?) by the immortal Dean, and how he got his revenge upon the president and all other officials of the show (instead of upon the judge) is too long to quote; but to any of us who know something of shows and their “seamy side”—as well as their comic aspect—it is intensely realistic and humorous, and yet by no means an over-drawn example of what village show promoters must put up with and be prepared to endure sometimes.

The rural exhibitor who is given to cheating is, of course, not such a finished artist at his work as some exhibitors we know. Very often he sees no sin in “winning anyhow.” Only last Christmas I judged a small show of fat stock, and the best pair of turkeys had their breasts beautifully inflated with air! The point of a penknife at once disclosed the fraud, but no one regretted the discovery more than I did; for the birds were, apart from the faking, undoubtedly the best in the show, and they ultimately, though disqualified, realised a better price than the winning couple. Two-thirds of the chickens had their breastbones cut at this show, and others were “doctored” in various ways; but there is not the slightest doubt that in many cases there was no direct intention on the part of these exhibitors to deceive the judge. The fault really lay with the show executive, whose rules were not exhaustive and plain enough for the rural exhibitor, who only sees a show about once a year. But although these things cause friction and discontent, they should be just as severely checked as those little tricks of, say, the village gardener who knowingly mixes several varieties of potatoes or apples in the same entry, and hopes he will not be found out. The duty of the committee, however, to see that the rules are explicit and concise is paramount, for many a beginner has his hopes blighted and his mind embittered towards shows simply because his unaccustomed mind was incapable of properly understanding the regulations.

Of course, the rural exhibitor has a way of thinking “all his geese are swans,” and there is generally more grumbling at the judge at these events than in those where far greater matters are at stake. This, perhaps, is a favourable rather than a deplorable feature, for it indicates some keenness among exhibitors; and I have generally found that if the judge can afford the time, there is nothing like a walk round the pens after lunch. It inspires confidence in the exhibitors, and, speaking



personally, quite the pleasantest part of the day's work is that hour in the tent, when questions are asked and answered, advice given, and friendly intercourse exchanged. And I think this action on the part of the judge is one that goes very far indeed to ensure the continued success of any village show. Sometimes one has to hurry for the last train for home, but if time can be spared it should be spent, first, in the tent, and then in any of the neighbouring gardens and poultry-runs of the exhibitors who may live close by.

## A SIMPLE METHOD OF PRESERVING EGGS.

**D**R. N. HANIKA, of Landwirth Wich, Bavaria, says that he has found in the pores of even newly laid eggs micro-organisms which cause decomposition, and that as it is evident from this that methods of preservation which aim only at the exclusion of the atmosphere must consequently be useless, he proposes in place of the various processes now in use the following novel method—one which he says attains the desired end completely. The egg to be preserved, which should be as fresh as possible, must be examined closely by tapping and otherwise to guard against cracks or break in shell. They are then laid in water of about 95 (ninety-five) degrees Fahrenheit or 35 degrees Centigrade for about 15 (fifteen) minutes or until they are well warm throughout. Every particle of dirt should be removed from the shells by wiping with a sponge wet with warm water. The eggs are then put in suitable quantities on a sieve net or loosely woven basket held for five seconds in boiling water and removed thence as quickly as possible into cold water. The eggs, still wet, are laid on a clean cloth and let dry off spontaneously by exposure to the atmosphere; under no circumstances should they be dried off with a cloth or towel. As soon as they are quite dry they are packed in a box with either ground peat, sifted wood ash, wheat chaff, wood wool, or wheat bran; the packing material to be made thoroughly dry by heating before using. The hands of the packer should be well scrubbed, before going at the work, with soap and hot water, a brush being used to make sure of cleanliness. The boxes should be stored in a cool dry place out of the reach of frost. Eggs thus preserved in June and July were found to be absolutely and perfectly fresh the next February and March (a period of nine months), no deterioration in taste, odour or general appearance being detectable. The philosophy of the process is simple and easily understood. The five seconds' dip in boiling water was sufficient, not merely to kill the microbes in the shell substance and between it and the inner skin, but to cause the coagulation of a thin but all-sufficient skin of albumen lying next the skin, and thus forming an impossible barrier to the exit of water and entrance of air with its microbe of decay.—*Lennox's Trade Journal*.

## Poultry Instruction in Cape Colony.

The Central School of Agriculture at Middleberg, Cape Colony, proposes to appoint a poultry expert. We hear Mr. Arthur Little is a candidate, and all his friends on this side will wish for his success.

## MARKETING CHRISTMAS PRODUCE.

By FRED. W. PARTON.

**T**HE Christmas trade is like that of no other, in that there are thousands of people who indulge in poultry of one kind or another at this time of year, while perhaps twelve months may elapse before they again depart from their usual beef and mutton. In fact, many consider the festive season incomplete without their goose or turkey, or the more humble duck or chicken.

It is a remarkable fact, but nevertheless true, that produce is sent to the Christmas markets in a very much more slipshod fashion than to any other market of the year. The reason for this is, of course, obvious; it is due to the great rush to get the huge numbers of birds on to the market in time to participate in the demand, which is so enormous while it lasts, but which is, unfortunately, only of short duration. Now, the same care is just as necessary at Christmas as at any other time. Certainly the demand is great, but it must be borne in mind that the competition is equally great, since almost every poultry-keeper has produce for disposal at Christmas. All sorts and conditions of buyers throng the markets in all our large centres of population, and these are mostly people who are very alert, and ever on the lookout for the best there is to be had. To obtain, therefore, the highest prices, and to secure the readiest sale, the produce must be presented to the buying public in such a manner that it will appeal to them. How often one sees chickens black or dark green on the crop, or round the vent, or green at the ribs. The explanation of this is very simple, and, therefore, simple to prevent. This green appearance, which really gives one the impression that the birds are bad, and that putrefaction has set in, simply means that they were not starved, or, as it is commonly termed, *pined*. It will thus be seen that no great amount of skill or experience is required to overcome this serious objection; merely keep the birds without food for twenty or twenty-four hours before they are killed.

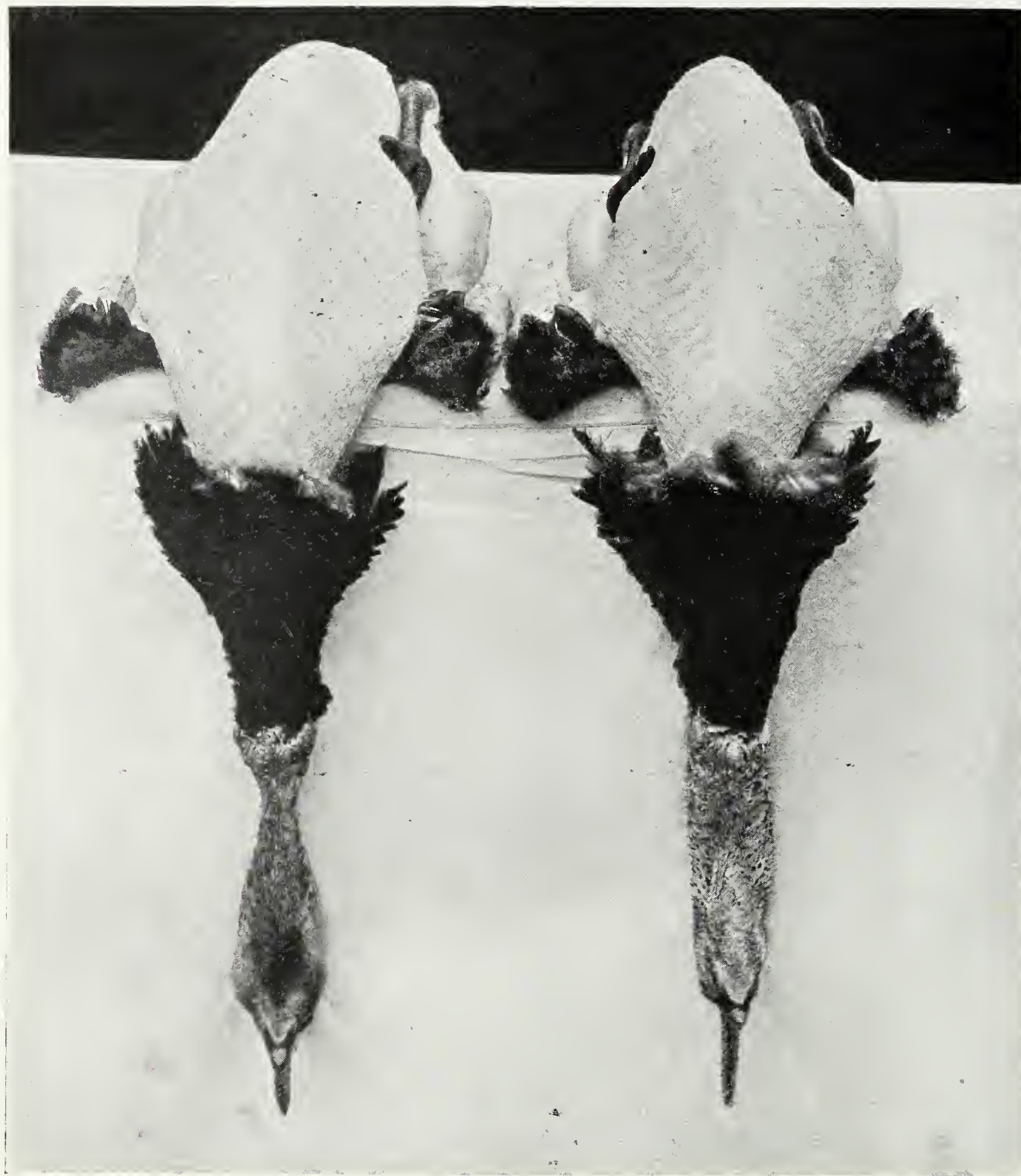
Whatever be the method of killing—and it does not matter a great deal how it is done—see that it is done expeditiously. It is, however, absolutely imperative that, whichever method of killing is adopted, the head is kept hanging downwards until all the blood has left the body, or drained into the neck at the base of the skull. Unless this is done, the flesh is dark in colour, which further detracts from the bird's appearance. Immediately the bird is killed, plucking should be commenced. If this is done when the body is warm, the danger of tearing the skin is minimised.

When the chicken is properly and carefully "*stuffed*" it should be shaped, and we have yet to come across a better method than that adopted in Surrey and Sussex. The birds are tied loosely at the hocks, and placed breast downwards in the shaping-board. This board is made in the form of a shelf of two pieces of board placed at almost right angles in which the birds are placed breast downwards. When the whole shelf is filled, a flat board is placed on the backs, this being weighted down, so that the birds are thus forced down into the angle of the shelf. They are left in this position until they are quite cold and set, and hence a compactness is obtained without doing



damage to the breast-bone. There is a general impression that only fattened specimens may be shaped in this way. It is quite possible that fattened fowls shape more readily than do lean chickens, since the latter have not the same flesh to force into shape. At the same time, there is no reason why unfattened fowls should not undergo this system of shaping. In fact, there is every reason why they should be so

same prices as those birds that have received proper preparation before being placed on the market. They should be carefully packed with layers of straw between each row of birds, to prevent rubbing or barking of the skin. It may be thought that with such a multiplicity of small details to attend to, the time required for their fulfilment would do away with much of the profit. This we very much doubt, since if the essential details



**A PAIR OF IDEAL CHRISTMAS TURKEYS.**

**These Turkeys were Bred and Fattened on Lord Rothschild's Farm at Tring.**

[Copyright.]

treated, since there is more room for improvement than there is in the fattened specimens.

As already stated, the birds remain in the shaping-boards until they are quite cold, and thus the danger of packing them when they are still warm is obviated. It is a point worth noting that if the birds are packed when they are warm they reach market in a very bad condition, and they will not realise anything like the

that we have enumerated are carefully considered and compared with the usual slip-shod methods that are so common, it will be seen that, taking into account the difference in labour on the one hand, and on the other the difference in the prices obtained, it is well worth the extra labour.

There are many different systems of packing, and I do not know of any one system that has a great ad-



vantage over another, provided that the birds are protected so that they do not "bark" and the blood does not smear the body if they have been cut instead of having the neck broken. It must, we think, be admitted by even the most apathetic of poultry-keepers that the right way is preferable to the wrong, since it cannot be claimed that the right way entails more labour or expense.

## WHY THE MAINE EXPERIMENT FAILED.

SIR,—There is something almost pathetic in the way in which the anti-heavy layers, anti-trap-nesters—I had almost written anti-progressivists—cling to the Maine experiment in their endeavour to show that breeding from heavy layers cannot improve the egg-yield of the flock. For years these results have been thrown at our heads from every corner, in season and out of season, sometimes with jubilant chuckling at the supposed discomfiture of the breeder of laying strains, sometimes with puzzled reluctance, but always with the apparently sincere conviction that we "can't get no forrarder nohow."

The man of figures is quite convinced that we are here dealing with an unalterable law of nature—the law of averages—entirely overlooking the fact that the law as observed by Galton dealt with human beings whose marriage laws are a trifle different from those of other animals.

If men would but look at the facts in other directions they would see that this law of averages is the direct result of certain methods, and that when these methods are abandoned the law vanishes, or, at least, sinks into an insignificant place, entirely overruled by stronger natural forces. *The law of averages is the sum of the results of out-crossing, the law of progress is the result of judicious, selective in-breeding or line-breeding.* The law of averages is inexorable, immutable, omnipotent for just so long as out-crossing is strictly enforced. Abandon that method, and adopt a vigorously selective system of consanguineous breeding, and you progress by leaps and bounds, with fluctuations doubtless, yet always progress towards the perfecting of the points aimed at.

To select the best for the purpose aimed at is only half the battle. Had horse breeders stopped there the law of averages would quickly have reduced the fleetest horses to mediocrity, as it reduces the laying hen. But breeders, with generations of farming experiences behind them, knew more about nature than to be content with such a half and between method. Having secured the animals possessing the best qualities, they took care to preserve those qualities, and the way to do it they learned from the ancient Egyptians, who handed down the practice through Greeks and Romans to the British farmer; and the secret is still the same as it was in the days of the Pharaohs—namely, purity of blood.

No other method has ever yet been found to bring the inheritance of certain points to perfection, and to establish them as inherent characteristics of the race.

The alarmists, who have misread the writing on the wall and have attributed to in-breeding the evils

that were the results of wrong conditions, wrong feeding, close confinement, laziness, greed and dirt, are naturally hard to convince. These misguided men, pitting themselves against "the inexorable law of averages" which follows out-crossing, inevitably come to grief, as they did at Maine. The "law" of in-breeding is intensification; it will intensify faults and diseases just as quickly as it will intensify good points—hence the need of rigid selection; no weakness or suspicion of weakness must be admitted into breeding stock. But if out-crossing is practised systematically then breeders need not blame the heavy layer or the trap-nest for their disappointment, but precisely that law of averages which their method sets in motion.

The Maine experiment failed, as we knew it must, from the moment that information was given that close breeding was to be avoided.

Think of it, after hundreds of years the racehorse has been brought to a pitch of perfection described as almost final. Would stud-owners dream of abandoning "thoroughbreds" and adopting a system of promiscuous crossing in order to outdo the present Derby winners? Whatever we have aimed at, whether swiftness, size, feathers, headgear, or any other point, perfection has been attained through in-breeding first, and later possibly widening the family limit to line-breeding, after the characteristics were thoroughly established in all the lines used. Men admit it readily enough as regards racehorses, stud bulls for special purposes, as beef-producers, for example; poultry fanciers practise it daily for feathers, be they black, brown, red, buff, or white. They practised it in the past when internal character was their aim, and the courage and pugnacity of the fighting Game were developed to their highest. In short, if they want any character from combs to feathers, tails, or shanks, abnormally developed, there is but one method—selection and in-breeding. "Yes," says the enthusiast, "fix on any character you please, and in a few generations we can perfect it by in-breeding—but, eggs, oh! no, you mustn't in-breed if you want good layers. You see, the egg is not handed down from generation to generation—at least, it's not the same—it depends on the poultryman, you know, whether he can get the most out of his birds. Besides, it might weaken them, the heavy laying, you know. Oh, no! any character you like, but not eggs." And so the inexorable law of averages is allowed full play. Ovaries apparently answer different laws from combs and feathers. But the heretic asks how have the laying strains come to be established? We had none in Britain, but from America there came the White Leghorn, the White and Silver Wyandotte, the Barred and Buff Plymouth Rock. How did they all arise? By in-breeding. How were their laying qualities fixed? By in-breeding. And fixed they were, when they left their originators, and ever since then breeders have been hard at work crossing and out-crossing and zealously reducing them by the inexorable law of averages! But there is one corner of the world where common sense prevailed—namely, Australia—and there the results differ very considerably from those at Maine.

I have not Mr. Laurie's figures by me, but I think he has very clearly shown that the average for Australia has considerably advanced in the last fifteen



years, and the system followed is that of in- and line-breeding.

Therefore when statistics point to the law of averages, and stern realists say "inexorable," the pedigree breeder is apt to reply "undoubtedly," and to add with a twinkle in the eye, "But, by the way, what male birds did you use?"

But even the pedigree breeder does not expect great advance in so short a space as eight years, and the nearer the limit we reach the less perceptible is the progress. It has taken, I believe, about a hundred years to obtain the last increase of one and a half minutes in the racehorse (I write without the figures by me). That the average for the British hen in egg-production has been raised by the use of pure-bred, and actually in-bred, birds from America is beyond question.

A. S. GALBRAITH.

## TUBERCULOSIS IN POULTRY.

**T**UBERCULOSIS or consumption, often referred to as liver disease, is one of the most common diseases of domestic birds, but it is more prevalent in hens and turkeys than in ducks and geese. It is believed that as many as ten per cent. of the deaths from "natural causes" among adult poultry are due to tuberculosis, and in some districts, especially among turkeys, the proportion is much higher.

### SYMPTOMS.

The most common symptom is diarrhoea, with the droppings of a greenish-yellow colour. In the later stages affected birds become very feeble and thin, the comb and wattles shrink in size and turn pale or dull purple in colour. The mucous membranes which surround the eyes and line the mouth are also pale and there is loss of appetite. Lameness is a common symptom, accompanied in many cases by local swellings of the joints or on the skin, especially about the feet and legs. The affection known as "Bumble foot" is often tubercular in origin, and birds so affected should not be kept along with other poultry or used for breeding purposes. The disease usually takes a protracted course, ending in paralysis and death.

Tuberculosis is caused by a bacillus or germ, and the parts of the body usually first attacked are the intestines, liver, and spleen, the infection being taken in with food which has been contaminated by contact with the droppings of affected birds. Examination of the body after death reveals small whitish patches, called tubercles, in the liver, spleen, and on the lining of the intestines, but these may be found in other parts also.

### PREVENTION AND TREATMENT.

It is not possible to treat this disease successfully, and attention should, therefore, be directed to methods of prevention. Since the bowels are usually affected, the dropping of tuberculous birds are the chief source of infection. Birds which are ailing and which exhibit the symptoms of tuberculosis should, therefore, be destroyed. The stock remaining should be carefully examined, and healthy birds transferred to fresh quarters. Any birds subsequently showing signs of disease should be removed immediately and the house disinfected; as a further precaution, lime should be spread under the perches. The old quarters should

undergo a thorough cleaning and disinfecting, and be allowed to remain unoccupied for several months.

Where a serious outbreak occurs it is safer to clear off the entire stock, then to apply freshly-burned lime to the ground, and rear a fresh stock in a portable house on new ground. It is a great mistake to retain for stock birds which become sickly or which, when isolated and carefully nursed for a few days, do not respond to treatment. All such birds should be killed and the bodies burned. The losses from tuberculosis and other diseases of poultry would be appreciably reduced if such precautions were adopted.

Where poultry are kept in confinement, overcrowding of the runs should be avoided, a change to fresh ground should be frequently arranged, and lime should be used as a top-dressing for the runs during their period of rest. Fowl houses should be roomy, dry, and well ventilated, and should be kept scrupulously clean and frequently whitewashed; the disease develops rapidly in an atmosphere of dirt, damp, and darkness. Food for poultry should be given in troughs and should not be thrown on ground contaminated with the droppings of other fowl, because, as already stated, infection is received with the food.

To sum up: isolate or destroy all affected birds; breed only from healthy stock; keep the fowl houses clean, and allow sufficient light and ventilation; periodically change the fowls to fresh ground, and, where possible, adopt the colony system of housing.—[Department of Agriculture, Dublin.]

## Prices of Hatching Eggs.

The highest price we remember in this country for eggs was £5 per dozen, which works out at 8s. 4d. each. But that is easily capped by White Orpington eggs sold by Mr. Ernest Killerstrass, of Kansas City, U.S.A., who has sent out quite a number at £30 for 15—£2 each, and the buyers appear to have been satisfied with their bargain. Last season he sold 4,534 eggs at \$2 (8s. 4d.) each.

### American Prices.

In the report of the Dairy and Cold Storage Commission for Canada just issued it is stated that eggs at Boston range from 17 to 36 cents (8½d. to 1s. 6d.) per dozen, at New York from 17 to 41 cents, at Chicago from 19 to 30 cents, at Toronto from 19 to 28 cents, and at Halifax from 6½ to 28 cents, for the firsts or selects. Dressed chickens at New York are from 13 to 35 cents per lb., Montreal 11 to 16 cents, and Toronto 12 to 21 cents.

## South African Laying Competition.

The report of the manager of the Western Province Laying Competition, Mr. Arthur Little, for the month of August discloses a triumph for the Leghorns as winter layers (says the *Johannesburg Star*), for not only do they hold a long lead over all other breeds, but the strains and colours of the leading pens are entirely different, thus showing that the breed as a whole is undoubtedly the most suited to the conditions of the Western Province, and by inference we can gather that they are also the best suited to most other parts of the Union, though that has yet to be put to practical tests. There are twenty-six pens competing, with six pullets in each pen.



## MATING DUCKS FOR EARLY LAYING.

By W. BYGOTT.

FOR early and prolific laying a great deal depends upon careful selection and mating. The stock birds should be mated from unrelated, well-known, reliable, and prolific utility strains; although I have had young Rouens and Aylesburys of prize-winning strains, January and February hatched, commence to

upon large Indian Runner ducks is the most suitable and gives excellent results, their offspring being as large again as the parents, full of health, vigour, and stamina, retaining all the egg-producing powers of the Runner duck, with good size and quality. Unless ducks of this cross can be procured, guaranteed bred from pure reliable prolific strains on both sides (as it entirely defeats the object to commence with non-descripts), select three or four large February-hatched Indian Runner ducks, record laying strains. February-hatched preferred, many January birds being



A FLOCK OF AYLESBURY DUCKS.

[Copyright.]

lay the following June, the eggs from such birds (after the first batch) being very fertile when starting to lay again in November. These are exceptions, and I should, to ensure successful early laying and large quantities of eggs, prefer the ducks to be of a smaller variety, such as the Indian Runner. These should be sure layers at five to six months old and would recommence with reliable fertile eggs when wanted in November, nearly all the first batches of eggs from young ducks being clear as a rule. For utility purposes these ducks should be mated with Aylesbury or Pekin drakes of prolific laying strains, of moderate size, taking care that they have been reared naturally and are hardy—not forced in any way, a large percentage of heavy and over-fed birds being ruined for successful breeding. For early utility purposes a first cross with a moderate size Aylesbury drake

cramped in shape, owing to being too much confined in bad weather, and although good for the table are not suitable for breeding. Mate the February ducks with a moderate size Aylesbury drake, and the offspring may all be reared in the best possible way until the sex is discerned, then take as many of the February-hatched ducklings as are required to select from for laying the next season. Rear them in the ordinary way for stock purposes, of which I shall have more to say later, all the remainder, drakes and ducklings, being fattened and killed off. The selected ducks should be again crossed with an Aylesbury drake (7lb. weight), and their offspring, if reared well, could be made to weigh 10lb. each at six months, and 6lb. each when ready in first feathers, at nine to eleven weeks, and should all be killed off for the spit, taking care to retain the parent birds for a second year



and having others of the current year of the same first cross to follow. If more than one trio of ducks and one drake is desired, two drakes and nine ducks, or three drakes and fourteen ducks, may be run together, providing they have plenty of room, but two drakes and seven ducks or three drakes and twelve ducks are safer. When rearing good early-laying stock ducks, much depends upon circumstances and accommodation at hand to secure a good, strong, healthy constitution. After showing the first feathers at six weeks they should have the free range of fields and ponds, &c., and be fed chiefly upon whole wheat, oats, and occasionally white American maize, leaving off soft food entirely, or giving it only once a day. Up to that time they should be reared in the same manner as for fattening for the table, commencing as soon as they are hatched with whole rice, left to stand in boiling water until cool, then at three or four days old mixing it with good sound oatmeal; at ten days adding other meals, greaves, bullock's liver, or sheep's pluck, and a trough of water with grit and a little whole wheat added. If kept in confinement they should have soft food once a day, with greaves two or three times a week in place of worms and slugs, which they cannot procure for themselves, and if possible a supply of running fresh water, however small. As the drakes show themselves at six weeks old they should be removed from the ducks intended for stock, and fattened up and killed. By September the February-hatched birds will be a grand flock of laying ducks and should be mated with the Aylesbury any time, or not later than October; these should have free range and access to ponds, &c. To have a continual supply of eggs during a frost in winter, the ducks should, if possible, have access to a running stream, which will not easily or entirely freeze over; in any case the ice should always be broken during a frost; and a little barley meal mixed with greaves can be given while the blast lasts, but should be left off as soon as milder weather returns, as a too highly stimulating food is dangerous to laying birds in many ways, causing infertile and also eventually unhealthy, unsound, and finally soft eggs, and in many cases death from inflammation of the egg organs. If attention is paid to all details, nothing except accident should prevent an abundance of fertile eggs, and ducklings ready for the spit at a time when there is a great demand for them. It is also quite possible to have a good hatch of fertile eggs without water, except for drinking, in a limited space if the run is kept quite clean. Grit and animal food, such as sheep's entrails or, better still, worms, should be given them. A child can always collect the latter, following close after a plough, or they will be found on mild nights in gardens and upon lawns by quietly taking a bull's eye lantern and searching for them. A practised hand will soon secure a pint, as the ground is usually alive with them. The Pekin bears confinement well, in fact, better than the Aylesbury, but being a heavy feather-producing variety is seldom found free from stubbs after first feathering. The Cayuga is also a splendid variety, and suitable for a limited space, and being of rich, lustrous green plumage the feathers do not get soiled so soon as those of lighter coloured varieties; these birds are excellent in flavour and of good size, drakes 10lb., ducks 9lb. in fine specimens of the breed.

## CHICKEN POX.

By DR. N. W. SANBORN, Holden, Mass.

**C**HICKEN pox is becoming altogether too common. Long known in the States south of Virginia, and always present in Cuba, it is spreading northward, and is reported from most of the States along the border. Poultrymen should learn all they can of this illness that they may know it when it appears, and be ready to treat it along sensible drug lines.

It is a disease of the blood, with local manifestations. There is a definite time of incubation. It does not come from faulty feeding, poor housing, weak stock. Behind each case was a previous one. You will never have chicken pox in your flock unless the germ of the illness is brought in from outside.

Uncomplicated chicken pox is a simple ailment. It can be treated with good results. Breaking out in the cold, wet weather of late autumn, it is likely to be a serious disease. Combine chicken pox with fall colds or roup and you will lose many of your birds. I am told that half the chicks hatched in Cuba die in the wet season with chicken pox. While all birds are liable to contract this disease when exposed to the germs of it, it seems to select the nearly grown chicks in the fall.

### ITS COURSE.

Let us suppose your place has never had a case of chicken pox. You buy from a breeder one hundred miles away a cockerel. He comes from a plant where chicken pox is familiar. Or perhaps there is no disease on the place, but he was sent out on approval and got the disease while away, and is re-shipped before any signs of sickness can be seen. At any rate, he appears at your station. You take him home and remove from the coop. He may seem well, looks all right, except there may be a few marks on comb as though he had been scrapping and blood has made a few warts on the comb or wattles. It makes little impression on you unless you are in the habit of quarantining all new stock. It is spring time and the small flock of females are waiting for the head of the pen. Without a thought of trouble you put him in the pen and take pleasure in the new mating. The next morning to your surprise there are more of the warts or scabs on comb and wattles, and a few have appeared along the edge of the eyelids. The cockerel is not ill—yet he looks sick to you. Into the house you go, get out your copy of "Poultry Doctor," and try to decide what the trouble is with the new bird. A good plan is to work by exclusion. Can it be a certain disease? No. Can it be another ailment? No. Run through the list until you have thrown out all except one. Can it be chicken pox? Yes.

It may mean little to you to come to the conclusion that you have this disease on your place. Later, when you have had all the experience you desire, it will mean much.

You put the cockerel in a coop alone and proceed to treat him. What about the pullets? Wait ten to twelve days. One, or two, or all of them, most likely will then show the breaking out on the head as did the cockerel. A single case, then ten. Any danger to hens in the next yard? Probably. If the weather is pleasant you may go a few weeks and see no outbreak. But let it rain, the yards get muddy, and you are likely to see more chicken pox in the next flock. The



matter, or scabs, from the head has been washed under the fence and infected the other stock. Or, if the hens can scrap through the wire netting, you will get the disease passed along.

If the hens add on to the chicken pox anything of the autumn cold sort you will see the breaking out on the head increase in numbers and size, the eyes close, and a sickly looking bunch of birds will be in your yards.

#### TREATMENT.

Outside treatment matters little except as it makes the bird less uneasy and destroys the germ life in the sore. An ointment made of petroleum jelly ten parts and coal tar disinfectant one part rubbed on all the warts and sores will answer all needs. The real positive treatment is the internal use of calcium sulphide. I would plan to get one grain of the dry drug into a five pound hen, from two to four times a day. This drug can be mixed with wet mash and quickly fed. You will find it in the drug stores in one to four ounce bottles. It must be strong smelling to have kept its virtues. The top layer in the bottle may be lighter in weight and colour. If so, pour it off and use the good drug underneath. I want to get about three grains of the drug in to a five pound hen during the daytime. Keep up the treatment for a week. In case you have little chicks with the disease plan to give each one a single grain of the drug once a day. Mix freshly and use within an hour.

Avoid cold breezes, damp houses, mouldy litter, or food. Give the sick birds a sunny house, dry, pure air, clean litter. Feed ordinary grains and mashes. Reduce the animal food of the ration about thirty per cent.

#### PREVENTION.

Knowing the cause of the disease—prevent its getting a start on your place. If it appears in your neighbour's hen-house have no passing from his flock to yours. The scab or matter may be brought on the shoes or clothing. Doubtless you have seen this disease in the show room and wonder when your birds will return home with it. The bird you show may be cooped in a pen that a few weeks before held a case of chicken pox. I have seen three cases of chicken pox in a single show within a thousand miles of my own home. It is not pleasant to tell, but we must know the dangers if we would avoid the evil. Quarantine all birds bought or returning from the show. Do the same to stock sent out on approval and returned to you. Cooped apart for fourteen days, and remaining well, you may consider them safe to return to the flock or ship out to another buyer.

You may have a few cases too severe to doctor. Kill and burn! Take no chances of future illness through putting the dead birds into the ground. I know one outbreak that followed exposure of such bones after being buried over twenty-four months. The germ life is strong and clings to bone and tendon for months, if, indeed, it does not escape into the nearby soil.

It takes time and trouble to clean up a pen and yard after having cases of chicken pox. Roosts, hoppers, water dishes, walls, and floors may have the contagion clinging to them. Hot water, mixed with Napereol, Carbonal, Zenoleum, Pratt's disinfectant, or some one of the tar germ killers, making a two per cent. mix-

ture, can be used to scrub all these working parts of the house. The runs should be spaded, seeded to oats or rape and left unused for a few months. If it is in the chicken season raise the new lot away from former houses and runs.

Prevent chicken pox by knowing how it is introduced. Cure your cases by good care and sound treatment. Get rid of all infection, and when once more free from the germs of the disease ward off new outbreaks.

Experience seems to prove that calcium sulphide given to well birds will almost prevent their contracting chicken pox. Try this line of treatment, if a single case appears, on a flock or on birds in neighbouring pens. Make the dose the same as for ill hens—three to four grains of the drug each day. With calcium sulphide, as with all medicines, do not give it carelessly. Use the three to four grains, in divided doses, and do not exceed a grain for each pound of the hen's weight.

## THE NEED FOR EXPERIMENTAL WORK.

THE need for experimental work in connection with poultry husbandry is indeed great. Those who have from time to time put their theories to the test, and who thereby elicited certain minor facts, can perhaps realise more fully the enormous amount of labour which will have to be expended before any important advancement is made in the industry by increased knowledge, than those who have as yet not attempted any research work. To accumulate data on any given subject calls not only for patient labour, but also for much thought and a certain amount of scientific knowledge; still, experimental work must be conducted if we are to place the poultry industry on the level which is its right.

When the fact is taken into consideration that utility poultry-keeping, as an organised branch of the great agricultural art, is only some thirty years old, one is compelled to admit that a great amount has been accomplished, but when the mass of information still to be gathered is considered it seems as though practically nothing has been done. All credit must be given, not only to those early pioneers of utility poultry-keeping, but also to those who are working for the advancement of the industry to-day, but even in face of this one cannot but think that the need for experimentalists at the present time is very great.

We are undoubtedly working at a disadvantage in this country in that all efforts must be personal and that no public funds are available for the endowment of experimental or research work, but there should be nothing in this to deter us all from doing our utmost in the direction named. The advocates of utility poultry-keeping had to fight harder battles and overcome more, seemingly insurmountable, difficulties in the past before they were able to place the industry in the position which it has now attained as one of the most important of all the minor branches of agriculture; therefore we are only asking for a continuance—but to an increased degree—of this individual effort.

It is difficult to select special points for elucidation,



from out the great mass of subjects, as they all appear so important, but we should like to make a few suggestions indicating certain lines along which work might be conducted with advantage.

Artificial incubation is wonderfully successful, considering that a machine is employed to do the same work as a hen instinctively performs, but incubators are a long way from perfection. Experiments in incubation should be in the direction of hatching more livable chickens rather than an increased number. After keeping careful records for some years past, we have come to the conclusion that an average of 80 per cent. of the fertile eggs can be hatched during an entire season, and we do not think that hens do better than this, but in our minds we are certain that hen-hatched chickens possess more vitality and that they can be more easily reared. Some of the questions which still remain to be answered are: (1) What relative degree of humidity of the air surrounding the eggs is required to produce the correct amount of evaporation from the eggs? (2) What quantity of oxygen should be supplied to the eggs? (3) Whether the presence of carbon dioxide in the egg drawer is beneficial or otherwise? (4) Whether contact heat, as in the old Cantello and Penman incubators, or radiated heat, as in the present-day machines, is better? (5) Whether dead-in-shell is caused by an incorrect amount of water vapour in the air of the egg chamber or to some inherent weakness of the germ? and (6) Whether white diarrhoea in chickens is caused, as claimed in America, by artificial incubation, or whether it is due to some other influence?

Information is also required with reference to the following:

The best method of feeding for winter eggs; whether artificial rearing cannot be improved by the introduction of new methods and better appliances; the most suitable housing for winter eggs, whether on the colony, portable house, or scratching-shed system; the Mendel law in relation to poultry; all questions of fattening poultry, particularly with reference to the influence of the different foods employed; and a thorough investigation of the diseases of poultry, their causes, prevention, and cure.

All of these subjects are of vital interest to those who have to make their livelihood from poultry-keeping.

In conclusion we would say that experiments must prove something, whether negatively or positively, therefore no labour in this field can ever be counted as lost.

### Railway Rates.

For eggs shipped from St. Petersburg to Manchester, via Hull (a distance of nearly 1,400 miles), the cost is 49s. 6d. per ton; and from Riga to Manchester, via Hull (over 1,100 miles), the freight is the same. The rate from Riga to Manchester, via the Manchester Ship Canal, is 40s. per ton, the distance being nearly 1,600 miles. Compared with these charges, the average rate for eggs from inland towns in Ireland to Manchester is about 47s. per ton, but in some cases the rates range as high as 50s. to 54s. per ton.

### THE ART OF CRAMMING.

TWO great advantages of machine-cramming are that, as the whole meal is injected at one operation, there is considerable saving in time in comparison with even funnel-feeding (the quicker of the two older methods) and the process is less exciting to the fowl; but, on the other hand, the risks of ignorance or carelessness are considerably increased, and there is not only the danger of suffocation by a false passage of the nozzle, but also that of crop-bursting, which is the initial blunder of the novice. Although it is always advisable for the beginner to acquire such practical knowledge as the operation of a cramming-machine under the direction of an experienced man, it must be recognised that men have taught themselves more difficult



THE WAY TO CRAM A FOWL.

[Copyright.]

arts, and these notes are written in the interest of intelligent tyros who wish to still further improve the weights the birds have themselves attained by trough-feeding.

Although differing slightly in constructive detail, the general principle of the three or four makes of machines in common use is practically the same. The chief parts consist of a large funnel-shaped food receptacle at the apex of a tripod arrangement of legs,



the latter shod with wheels to facilitate rapid movement from pen to pen. From the base of the food receptacle a flexible tube projects, the nozzle of which is inserted in the gullet of the fowl, and the semi-liquid food is forced out of the machine into the crop by the operation of a piston and treadle arrangement. The bird must be so held (firmly against the body) that, whilst it is unable to struggle, there is at the same time every opportunity for the full expansion of the crop, which must be held with one hand in order to determine the point at which the foot must release the lever—the crop being full—and the bird be returned to its coop. That there is a wide difference in the capacity of crops is a fact to be always remembered, the necessary quantity of food for each fowl being a matter for the judgment of the operator, and entirely independent of the mechanism; the constant recognition of this responsibility, together with the necessity of holding down the tongue during the introduction of the nozzle and the straightening of the bird's neck, are matters of primary importance. The ingredients of the food mixture should be the same as in trough feeding (Sussex ground oats, mutton fat, and milk), but the consistency must be suited to the free working of the machine—viz., that of fairly thick cream. The process of cramming consists in the repetition of this machine-feeding twice daily until the birds are "ripe" for killing.

This condition of ripeness is another matter involving the recognition of individuality in the fowls, because all birds do not arrive at their nearest approach to perfection with the same rapidity or clock-like regularity, and the determination of the proper time to kill a fowl can only be arrived at by practice. The novice may, however, be to some extent guided in this matter by an examination of the space between the two pieces of cartilaginous substance which approach the vent from the sides of the backbone; if these pieces of cartilage are easily felt or there is a hollow space between them, the bird is not sufficiently fat, but when their position is unascertainable the process has probably proceeded as far as the novice can safely continue it.

## DECEMBER NOTES FOR AMATEURS.

**T**HIS is one of the most important months of the year, in more respects than one, for it not only marks the end of the market breeder's season, but the beginning of another season for both fancier and utilitarian. The amateur is more or less affected in both cases, for the festive season provides him with a good opportunity to clear off the last of his surplus cockerels, and the approach of a new breeding season reminds him that it is time to be making his arrangements for hatching or, at any rate, for mating his stock.

First of all, however, let us consider the disposal of the surplus stock. Now, some people imagine that one can dump any kind of rubbish on the market at Christmas time, and it will realise a good price. But that is a mistake. There is so much rubbish about, foreign and home grown, that the value of such produce never rises beyond a certain mark, but for fat young fowls there is always a steady demand, so that the proper procedure is to get flesh on the birds with-

out delay. The degree of success attending this operation will depend upon the age of the birds and the way they have been brought up. Half-grown raw cockerels are difficult to fatten, whereas birds that are well forward in condition and that have been fed generously during the past few months can be got into good condition with very little trouble.

For the amateur who has no convenience for cramming we cannot recommend the plan of confining the birds closely in an outhouse, for sooner or later they will go off their feed and will fret under such conditions. Keep them in a small, sheltered run by all means, and be sure that only birds which have been brought up together are allowed in the same run, for quarrelling and bullying are fatal to progress. Feed the birds three times a day in troughs, let them eat as much as they can, and remove the troughs after each meal—never leave food about.

For the first feed of the day use house scraps, boiled potatoes, or a mash made up of maize-meal, pea-meal, and Sussex ground oats. The ground oats with scalded house scraps of potatoes make a serviceable and economical feed for this purpose. Then at midday give scraps of meat and fat, with more soft food, such as we have recommended, whilst for the last meal of the day let the birds have a good feed of maize, wheat, and oats. Do not forget a little green food and grit every day, and let the birds have plenty of water to drink.

Three weeks of feeding on these lines should add materially to the weight and to the value of the birds for table purposes, and when the time for killing comes, see that they are starved for twenty-four hours, in order that they may be the more easily cleaned. Killing a fowl is a very simple matter when you know how, but many amateurs find difficulty in dislocating the neck. The proper way is to grasp the legs and wings with one hand, and with the other clasp the neck between the first and second fingers from beneath, resting the thumb upon the back of the head. Then simultaneously stretch out the neck and put pressure upon the thumb so that the head is forced back, causing dislocation. Pluck whilst the birds are warm, but whether the birds should be drawn and trussed or not depends upon the market for which they are intended.

We invariably advise amateurs who have only a few birds to dispose of to sell them among their friends or obtain private customers locally, which is not a very difficult matter at Christmas time, and such customers naturally expect the bird to be prepared ready for the table. When they go to a dealer, however, it is customary to send them plucked, but not drawn and trussed.

And now a few words with regard to breeding stock. For early breeding you must depend upon well-developed stock, and for general utility purposes we prefer yearling hens to pullets, if such birds are laying. Choose a vigorous, well-developed cockerel to run with them, and mate up the pen from four or five weeks before fertile eggs are required, to give the birds plenty of time to settle down. Some exhibition breeders have already mated up their pens, and will have chickens out on New Year's Day; but even if the amateur cannot do this there is no reason why, by putting a pen together at once, he should not have chickens out during next month.



## REVIEWS.

### THE LEGHORN FOWL.

LEGHORNS: A PRACTICAL TREATISE ON THE BREED. By L. C. Verrey. London: *The Feathered World*, 97 pp., illustrated (Two Coloured Plates), 1s. 6d.

AS an ardent supporter of the Leghorn Fowl and a breeder for nearly thirty-five years, there is no one in this country more qualified than Mr. Verrey to write upon it, equally from the exhibition and

regardless of the economic properties of the real, and consequently breeders have striven to produce birds according to standard requirements only. Though Leghorns still lay exceedingly well, they do not produce that abundance of eggs for which their ancestors were so celebrated. However, the Leghorn still remains a handsome and striking fowl, with an individuality which singles it out from all other breeds of poultry." These remarks apply to the English type. Separate chapters are devoted to the many varieties of this breed, giving history, descriptions, and standards of points, whilst the sections given to



A FAMOUS BROWN LEGHORN PULLET.

Belonging to Mr. L. C. Verrey, one of our most celebrated Leghorn specialists and author of "The Leghorn Fowl," reviewed on this page. [Copyright.]

practical sides, even though he is a strong and frank antagonist of modern breeding, happily restricted in the main to this country. We welcome, therefore, the Sixth Edition of his brochure, which was first published twenty-four years ago. That has been completely revised and re-written in most part, and is now a valuable record of a breed which, although not so popular in shows as at one time, is yet one of the most widely distributed breeds of fowls all over the world, appreciated equally for its beauty as its prolificacy. In the Preface Mr. Verrey says: "It cannot be denied that breeding exclusively for the perfection of plumage and ear-lobe has tended greatly to make the present generation of Leghorns simply exhibition fowls and lessened their reputation as egg-producers. This result has no doubt been brought about by the creation of the standards of perfection which were framed to aim at the ideal,

management cannot fail to be of service, resultant as they are from practical experience with the Leghorn over a long series of years. This treatise can be warmly commended to older and newer breeders alike, and Mr. Verrey has done well to give it in the present form.

### A STANDARD BOOK.

FREAM'S ELEMENTS OF AGRICULTURE. Edited by J. R. Ainsworth-Davis, M.A. John Murray, Albemarle Street, W. 5s. net.

IN 1892, in response to the many demands for an elementary work on agriculture, adapted for use in rural and other schools and classes, the Society published a text-book which was prepared by the late Dr. W. Fream, with the assistance of distinguished authorities in each branch of the subject. It was then



hoped that the book might be found to become a standard work, and, having regard to the fact that it had reached the seventh edition, with a sale of 39,000 copies, the Council this year decided to issue a new and revised edition.

The work of editing was entrusted to Professor J. R. Ainsworth-Davis, of the Royal Agricultural College, Cirencester, who considerably extended the scope of the book and brought it up to the present date.

The original work supplied elementary information then badly needed, but which is now taught in all grades of agricultural education. Such information has now been largely replaced by material of more advanced nature, but the book still aims at being intelligible throughout when read by those who have no knowledge of the subject. All chapters have been carefully revised, brought up to date, and in many cases rewritten or extended by experts in their particular branches. Chapters on fruit culture and poultry have been added. The plates afford a new and welcome feature.

All the illustrations of farm animals are reproduced from photographs of more or less notable prize-winners, and great pains have been taken to make the index complete.

## SEASONABLE SOUPS.

**I**N the preparation of the following soups, which are exceedingly dainty and appetising, and at the same time full of nourishment, good strong stock is an indispensable item. A plentiful supply, therefore, should always be kept on hand ready for use when required. This is really a very simple matter if the one who is in charge of the culinary arrangements will see to it that every tiny scrap of meat and all the odd bones and trimmings available are used for this purpose. Taking it for granted, then, that good, properly cleaned stock has been prepared, the making of the soups becomes an easy task.

**SOUP A LA JULIENNE.**—Take the requisite number of carrots, turnips, onions, leeks, and stalks of celery, and after carefully cleansing the vegetables, cut them up into thin shreds about an inch long. Partially cook these by frying them in a little butter or pure beef dripping, and then, when nicely browned, drain them from the fat and put them into a saucepan with two or three quarts of good clear stock. Boil very gently until the vegetables are sufficiently soft, carefully removing any scum which may rise to the top during the process. When about half cooked add to the soup a seasoning of salt and pepper, a tablespoonful of sugar, and, when they are to be had, some partially-cooked French beans and cabbage lettuce, cut in shreds about an inch long, some asparagus tops, green peas, &c., and boil for a few minutes longer. When ready serve the soup in a hot tureen accompanied by bread dice which have been fried until nicely browned and quite crisp. Great care must be taken to see that the soup boils very gently, otherwise the clear, bright appearance which renders it so dainty and appetising will be entirely destroyed.

**CHICKEN SOUP.**—Put two or three tablespoonfuls of tapioca to soak over night in cold water and next day add it to the requisite quantity of chicken stock and boil gently until quite soft. In another saucepan

put a pint of milk, a small quantity of celery, a medium-sized, roughly-chopped onion, and a bunch of savoury herbs, and boil slowly until the various items are sufficiently cooked; then add the whole to the stock in the other saucepan and simmer for a few minutes. Patiently rub everything, except the bunch of herbs, through a sieve and return to the saucepan; bring to boiling point, and serve at once. *Note.*—If a richer soup is preferred, soak six ounces of stale breadcrumbs in a little milk, or white stock, and when they have absorbed the liquid, mix them thoroughly with four ounces each of boiled ham and chicken which have been mixed together, then finely minced and highly seasoned, and pounded to a smooth paste; moisten this with milk, or stock, and add it to the soup, then stir well until boiling point is reached, when the soup is ready for serving.

**HARE SOUP.**—The remains of a roast or jugged hare can be converted into most delicious soup by adopting the following very simple method: Carefully remove all the meat that remains and cut it up into half-inch dice, then cover these over and set them in a cool place. Put all the rest of the hare, the bones, add trimmings, stuffing, and any gravy there may be into a saucepan with two quarts of stock, a dozen outer stalks of celery, and a thick slice of white bread with the crusts cut off, and boil gently until the celery is tender, then strain the soup, remove the bones, and rub the celery and the bread through a rather coarse sieve, return the soup to the saucepan, add a seasoning of salt and pepper, the pieces of hare, a glass of port wine, and some red currant jelly, and stir over a moderate fire until the soup is quite hot without having reached boiling point, then add a little strained lemon juice, and serve in a well heated tureen.

**GAME SOUP.**—Carefully remove the meat from the bones and pound it smoothly in a mortar, then season it according to taste and set it aside until required. Put the bones and trimmings into a saucepan with two or three carrots cut in small pieces, three large onions cut in slices, four ounces of lean ham or bacon, six ounces of stale bread, a seasoning of salt and pepper, and two quarts of white stock, and boil steadily until the vegetables are soft, then press the whole through a sieve, add the pounded meat and return the soup to the saucepan. Stir in the beaten yolks of two fresh eggs and a cupful of good cream, and continue stirring over a gentle heat until just upon boiling point, then pour carefully into a hot tureen and serve at once.

**GIBLET SOUP.**—Take two sets of carefully prepared giblets and cut them up into small neat pieces, then put them into a saucepan with a slice of ham or prime bacon cut up into small dice, and an ounce of pure beef dripping, and fry for a few minutes, then add two quarts of good stock, an onion stuck with half a dozen cloves, a big bunch of savoury herbs, a few outer stalks of celery, a dozen peppercorns, and a little salt, and simmer gently for about two hours. Take out the giblets, which should be quite tender but not overdone, and place them in the tureen. Strain the soup and return it to the saucepan, add sufficient roux to bring it to the desired consistency and boil very gently for ten minutes, then pour it over the giblets in the tureen, which should have been kept quite hot, and serve with sippets of crisp toast, or daintily fried croûtons, neatly arranged on a small hot dish covered with a doyley, or a small dish paper.



# THE FEEDING AND HOUSING PROBLEM:

## A GLANCE AT THE STALLS AT THE CRYSTAL PALACE.

WE have only space for a brief summary of the exhibits at the Palace stalls, which were thronged with interested seekers after knowledge throughout the show.

ASHBY AND SONS, JOSHUA, Brixton Flour Mills. A good collection of poultry foods of high quality.

BRINKLER AND SONS, W., Corn Merchants, North Street, Clapham, S.W. Corn for poultry, in excellent variety.

CLARKE AND SON, W. G., Thomas Street, Limehouse, E. This firm claim that their Vigam Rusks contain everything necessary for poultry life, being scientifically prepared and containing no waste matter. The neat little sample boxes of these tiny biscuits were soon snapped up.

COLUMBIA POULTRY YARDS, Colnbrook, Bucks. A display including, among other appliances, their new Ther-mother, designed to provide for, and keep pace with, the growth of the chicks in an economical manner, while defying climatic changes. Theory and practice appear to have gone hand in hand to produce a very workmanlike piece of apparatus.

COOK, W. H., St. Paul's Cray, Kent. Mr. Cook had little leisure, for a constant succession of customers, past and prospective, kept him fully occupied. At the stall were samples of foods and remedies, and an attractive lot of photographs of winning fowls. He is offering some bargains in prize stock, a list of which will be sent on demand to any reader of the RECORD.

CRAVEN AND SONS, T., Corporation Street, Manchester. Here was the Kikeriki trap-door, which enables fowls to release themselves in time to capture the early worm.

CYPHERS, LTD., 119-125, Finsbury Pavement, E.C., The well known hot-air pattern incubator and other productions of the company made a good display. It was refreshing to notice that Messrs. Cyphers announce a reduction, and not an increase in the price of their poultry foods. Everyone should secure their complete catalogue, which contains a great deal of real interest to poultrymen generally.

DIXONS, Handsworth, Birmingham. Two stalls, where a fine show was made of various specialities, including "R. P."—the "elixir of life" for fowls.

GLOUCESTER INCUBATOR COMPANY (late Incubator Components Company), Gloucester. The machine shown here has several noteworthy features, the mechanical wick-trimmer, the automatic self-filler, the patent nursery drawer device, by which chicks can be removed from the incubator while the hatch is in progress without affecting the internal atmospheric conditions, &c. It is offered on a three months' trial and the firm guarantee its simple and economical working.

HART, B. C., Corn Merchant, 129, Stanstead Road, Forest Hill, S.E. Cut clover was an especial feature of this exhibit.

HEBDITCH, H., Martock, Somerset. A selection of the popular and useful appliances made by this firm.

IMPERIAL FOOD COY., 46, Haymerle Road, Peckham, London, S.E. A good display of poultry foods at prices to suit all pockets. Samples will be sent to anyone mentioning the RECORD.

JEYES, LTD., 64, Cannon Street, London, E.C. This firm had a bold display of their fluid, disinfectant powder, soaps, and other productions.

LASCO, LTD., 33, Carruthers Street, Liverpool. Here we found meat meal and bone meal; adjuncts to the poultry dietary long recommended and used by specialists. The certified analysis of the former is very instructive. Fat, 17.59; albuminoids, 45.12 carbo-hydrates, 6.96; phosphates and alkaline salts 19.05; silica, 0.86; moisture, 6.82; fibre, 3.60 per centum.

LIVERINE COY., Great Grimsby. The firm's various foods, including the famous Liverine, were shown.

MEECH, Randolph, Poole, Dorset. Mr. Meech gave visitors to the Palace a double exhibition. The "City" plant, already described, was in full operation, and his collection of houses and appliances was one of the outstanding features of the show, meeting every reasonable requirement of the fancier. Minor matters were not overlooked. Even in marking rings he had an ingenious celluloid affair of original pattern, both safe and simple. See "Anklet" marking ring in his catalogue. Nor must we forget the "City" 55-egg incubator, costing the same number of shillings.

MOLASSINE COY., LTD., Greenwich, and 28, Mark Lane, E.C. The firm claim that exhibitors will have no other foods than theirs once they have tested them, and they produce evidence that abundant eggs, lustrous plumage, healthy and rapid growth are the invariable result of their use. Is it wonderful that the stall had many inquiries?

MORLAND APPLIANCE COY., Crawley, Sussex. A good double brooder, guaranteed to save chicks, labour, and oil. It possesses the great merit of being absolutely storm proof. Certainly a very efficient appliance.

OSBORNE AND YOUNG, LTD., South London Granaries, Brixton, S.W. Another collection of food products of good quality.

PHIPPS, A. E. W., Dept. K., Midland Works, Harborne, Birmingham. Incubators, foster-mothers, and poultry-houses, and as Mr. Phipps obtained at this show a first prize for each, in the case of the incubator for the eighth successive year, needless to say all of great merit. The illustrated list, which describes these appliances, should be obtained at once by all careful buyers.

"PHOSTO" COY., Emsworth, Hants. It is no longer necessary to insist on the virtues of "Phosto," and we may say that the very convenient meeting place, which Mr. Arthur Hartley, F.C.S., the inventor,



provided at his stall, was equally appreciated. "Phosto" is now quite indispensable to every fancier, being absolutely safe to use in any circumstances.

SNELL, W. F., Marsh Farm, Yeovil, Somerset. Self-cleaning and other well-designed houses and coops were shown. The Comforter Coop obtained medal for best novelty.

SPRATTS' PATENT, LTD., 24-25, Fenchurch Street, E.C. The foods, remedies, and appliances of Messrs. Spratt are known all over the world, and their pamphlet, on "Chicken and Poultry Culture," which describes them, contains some valuable hints on fowl-keeping. It is hard to conceive a Palace show without a Hearson Incubator, here shown, as heretofore, in operation. Spratts', of course, penned and fed the poultry at this show.

STILES, A., Spring Bank Mills, Heathfield, Sussex. The Spring Bank Mills produce some especially fine Sussex ground oats, and their other goods are of high and consistent quality. A nice exhibit.

THORPE, ALBION AND SON, Rye, Sussex. The various productions of the firm have often been described in these columns, the excellent remedies for fowl disorders as recently as our last number. These genuine aids were represented here as were the food products of Messrs. Thorpe, especially their world famous home-ground Sussex Ground Oats. By the way, they now have the great Mr. G. A. Palmer acting as their medical expert.

TIPPER, B. C., AND SON, The Veterinary Chemical Works, Birmingham. An exhibition of medicaments specially intended for poultry.

WHITE, TOMKINS, AND COURAGE, LTD., 48, Mark Lane, E.C. The firm makes a great point of producing good, yet economical, foods, and their "Clarendo" poultry meal for regular use, and the "Clarendo" fattening meal for putting a nice finish on table birds, both answer this description. The former, they say, "makes laying a habit," and so should be extremely useful nowadays.

### Students of Poultry Culture.

At the meeting of the Association of Poultry Instructors and Investigators, held at Orono, Maine, in August, it was recorded that 3,800 students attended courses in this subject at colleges in the United States last year. How many were there in the United Kingdom?

### What the Law Says.

The following is quoted from an American exchange as to the law relating to the sale of food products, and ours is practically the same:

The Pure Food Law takes cognizance of the labels only in dealing with food products which do not contain injurious chemicals. If a consumer buys food from packages not marked at all, and there is nothing harmful in them, then the law does not apply. It does not seek to tell the manufacturer or packer to tell what his goods contain. The only object is to compel him to be truthful if he says anything at all about his product.

That is the basis of our Merchandise Marks Act. No case need be stamped, but if branded it must reveal the origin of the contents.

## SHELTER FOR LAYING STOCK.

AN important matter, and one that ought to be given attention to if winter eggs are to be plentiful, is the provision of shelter for the laying flocks in the field, but where, as is usually the case, stock are running over the same land, this is often no easy task, because sheep and cattle are very destructive of temporary erections, and the question of expense in erecting solid structures has to be considered. One way to meet the difficulty can be found by using hurdles, either wattled (which, though more expensive, save labour and are always ready for use) or covered with gorse, and securing these firmly to strong stakes driven into the ground, forming an enclosure within which the fowls can take scratching exercise and get ample shelter from cold winds and wet, yet plenty of fresh air. By using three hurdles for the back, two each for the sides, and two for the front, which should face due south (having the opening nearest the east side), a large number of fowls can find shelter. The roof can be constructed either of similar hurdles laid flat and secured firmly to the sides, or of strong unbleached calico that has been thoroughly saturated in boiling linseed oil and then dried. This latter has the advantage of being both rainproof and semi-translucent, but in that case the roof must be given a slight fall to run off rain. Strips of wood should be nailed across to prevent stripping by the wind. The scratching material can be of dried leaves, as offering no temptation to cattle, and a few boards nailed at intervals across the opening will keep the material from being scratched out and stock from trying to enter, though the fowls can get through. Such a shelter costs little but the labour involved, which is not great, as hurdles are to be found on most farms, and no damage is done to them by use in this way. The same shelter turned to the north is equally useful for shade in the summer. A little corn thrown among the leaves will keep the fowls busy and warm during the worst weather, rye being especially good for the purpose, on account of its small size, but occasional grains of maize will do no harm and are eagerly hunted for by the fowls.

## THE WHITE WYANDOTTE CLUB.

RESULTS of elections, 1911-12: Vice-Presidents—R. Anthony, 59 votes; J. Wharton, 54 votes; elected. Not elected—Miss Edwards, 40 votes. Committee—J. Wharton, 63; W. M. Elkington, 58; J. C. Hunting, 52; Mrs. Weiss, 51; Mrs. Trevor Williams, 47; P. M. Knight, 43; W. P. Hollis, 40; W. Moore, 38; W. Heyden, 37; elected. Not elected—J. Townend, 32; W. Whitley, 28; H. Hesford, 28. Club Judges—elected: J. S. Hicks, 64; C. N. Goode, 62; R. Anthony, 50; W. M. Elkington, 47; G. H. Richards, 39; H. Peel, 34; J. C. Hunting, 32; T. Furness, 30; P. M. Knight, 28; Miss Edwards, 22; W. Moore, 22. W. Heyden, 16; J. A. Cowe, 13; not elected. Eighty-five papers returned; two cancelled, being too late.

F. J. BROOMHEAD, Scrutineer.

J. STEPHEN HICKS, Hon. Sec.



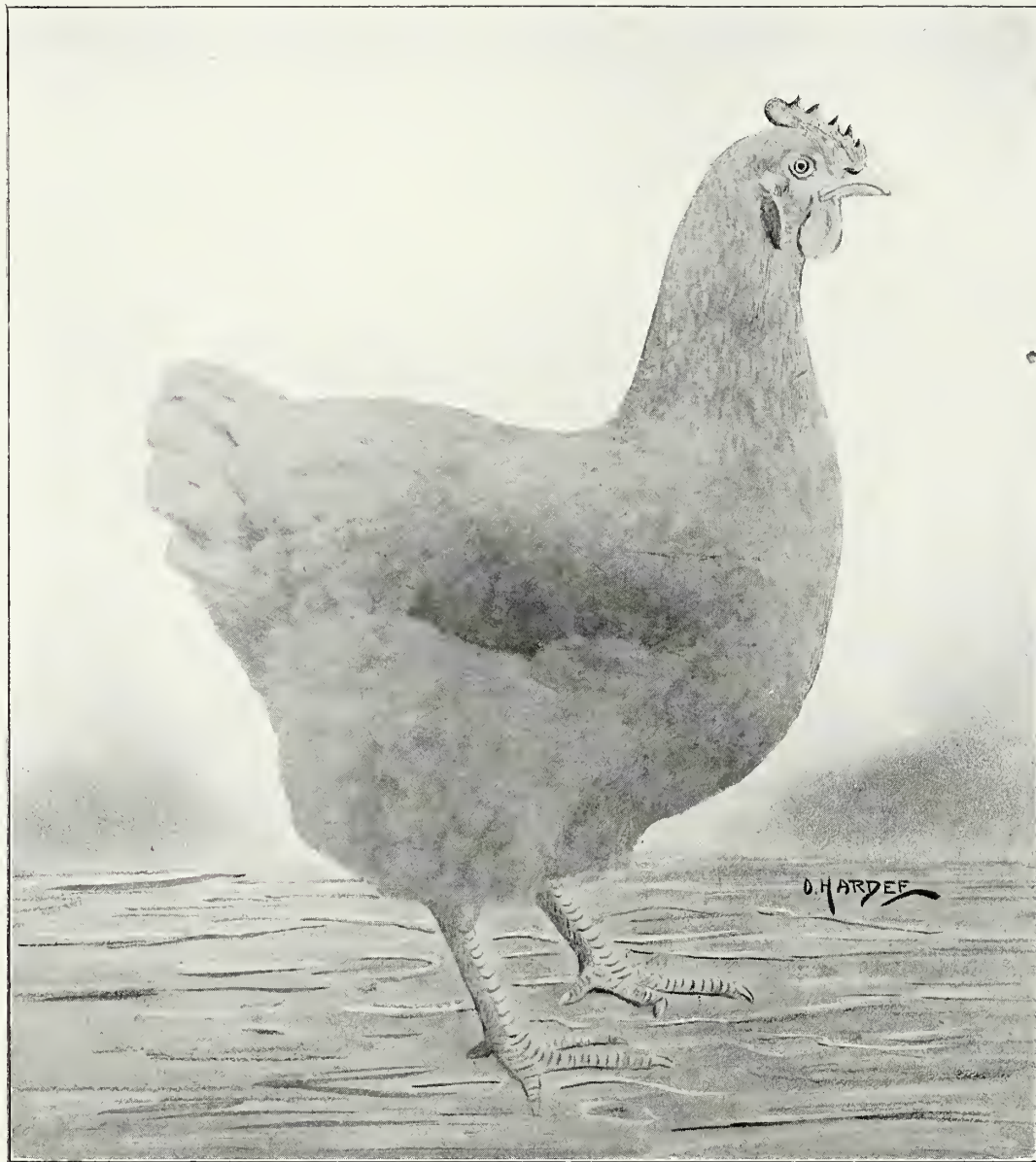
## AMONG THE BIRDS IN DECEMBER.

By J. W. HURST.

THE END.

The beginning of this month is more particularly associated with the final stages of one important seasonable production, whilst at the end the beginning of a new season's work engages especial attention, and the operations more or less overlap. Probably

for poultry of any class. It is not long enough to involve diminution as regards quantity, but it is enough to improve quality and keeping possibilities. Fasting is always essential, but at this season the necessity is intensified; not only is there the usual uncertainty regarding the seasonableness of the weather, but, inasmuch as markets and shops are heavily stocked, there is the liability of lengthened retention, not to mention possible delay in transit. During the time of



A BUFF PLYMOUTH ROCK HEN.

[Copyright.]

The property of the Bolton Model Poultry Farm.

enough has already been said relative to the special feeding of birds, of various descriptions, for the Christmas market, and it is reasonable to assume that the fattening process is now in progress. It only remains, therefore, to refer briefly to one or two items of importance in the final preparation. No hurry of increased output during the next few weeks should be allowed to interfere with the sufficient fasting of birds before killing. A period of full four-and-twenty hours without food prior to killing is none too much

abstinence the birds must be kept quiet, and not allowed the sight of other fowls feeding, and turkeys, ducks, or geese that are confined in sheds or pens must be kept clean by the renewal of bedding, the water-fowl being previously given access to swimming water to enable them to cleanse themselves. Such precautions will be appreciated during the preparation of the dead birds for market. It should be remembered that as the feathers come away more easily while the body is still warm, the plucking should immediately follow



killing, and, as the latter is better effected by dislocation of the neck than by other methods, the plucking must be performed with the head hanging down, to allow the blood to drain out of the body. For most markets fowls should be plucked clean, except as regards half the neck, upon which the feathers should remain.

#### THE BEGINNING.

The concurrent operations at the other end of production are chiefly relative to the early chicken trade, in preparation for which incubation is usually commenced this month, the first batches of eggs for this purpose being timed to hatch at, or about, Christmas, or the turn of the year. Hardiness and quick growth are imperative, size being of less importance in the early chicken trade, and, although other breeds are suitable for various table-chicken requirements, the Sussex is undoubtedly the best for rearing at such an unpropitious season, and in selecting eggs for incubation those of well-matured hens should be given the preference as far as possible. Where incubators are used particular attention must be given to the adjustment of the regulator and the maintenance of the required degree of heat, the fluctuations of the temperature in the incubating-room being duly noted and provided for, and the cooling periods must be modified according to the prevailing external atmospheric conditions. But in no case should cooling be neglected, because it is an undoubted fact that vitality is assisted by the process. The turning of the eggs and the shifting of their relative positions are among the details of necessary daily routine, and after the elimination of the clear and other worthless eggs by testing, the remaining fertiles must not be allowed to become bunched in one part of the egg-tray. They should be distributed, as far as may be, over the whole space, otherwise their temperature will tend to become very unequal.

#### WINTER REARING.

If successful winter incubation is attended by seasonable difficulties, successful winter rearing is subject to even greater disabilities, and at no period is close personal attention so necessary as at the turn of the year and during the early days in which growth must be achieved in face of adverse circumstances. Nevertheless, it is a fact that many early chickens are killed by an excess of attention, and that mistaken kindness develops delicateness instead of stamina. It is essential to guard against overheated brooders or a too close confinement. The birds must face open-air conditions from the start if they are to be profitable, and they can stand a lot of weather if the inside of the coop or rearer is dry and comfortable and airy. The hen is the best winter mother, because she knows when to brood her chickens and when to turn them out of doors, and the success of brooder-rearing depends upon the management of the appliance, for which the attendant must do the thinking. Inasmuch as the needs of growing chicks are very similar to those of reproductive hens, it is advantageous to include a proportion of meat in the winter dietary to supply that which is lacking in the form of insect life, which is naturally available in the spring; but this should not be added to the rations until the birds are at least a week old, their staple food consisting of ground oats and, or, biscuit-meal.

## CAUSES OF STERILE EGGS.

THE time is rapidly approaching when the common and regular question will be asked: "Why is such a large percentage of eggs infertile?" Before the difficulty actually arises it would be well to give a few of the causes of sterility, and thus perhaps enable certain of them to be guarded against.

With exhibition stock the cause of infertility is often that there is some abnormal point being bred for, as, for instance, the tremendously large combs of some of the non-sitting breeds, which are out of all proportion to the size of the birds. The excessive length of leg of other varieties is also frequently a cause of the trouble. This applies, of course, to any excessive point. The fancier, however, has an entirely different object in view to the utility breeder, and if the former gets only a very limited number of chickens of the kind for which he is breeding, his ambition is attained, while the utilitarian wants as many as he can possibly get. To a certain extent the same thing may apply to those who are breeding for eggs or another economic quality, who, by a long series of careful matings, for, say, egg production, have got the birds to such a state of prolificacy that a weakness may be found in another direction, which not infrequently takes the form of sterility. It is more, however, to the ordinary poultry-keeper, who does not specialise in any particular direction, to whom we would refer.

Probably one of the chief causes of infertility is that of mating immature stock. This is responsible not only for a large percentage of eggs being infertile, but also for "dead in the shell" and weakly chickens. When year-old birds on both sides are used, it should only be in the case of the non-sitting breeds, and only then when the chickens are to be hatched towards the end of the breeding season. It is desirable to have age on the side of one of the parents, and, for preference, two-year-old hens mated with a year-old cockerel should be used. A cockerel may, however, be chosen, but frequently he is one which was not hatched sufficiently early the previous year, and whenever possible, this should be guarded against. The number of hens to be run with males of the different varieties can only be definitely settled by experience, since strains, as well as breeds, vary considerably in their capacity in this direction.

The main point for the poultry keeper's *immediate* attention, if he wishes to save himself annoyance and delay in his operations next season, is to preserve the stamina of the birds that compose the breeding-pen. This is of the utmost importance, and if it is neglected all other observances will be of small avail. Many breeders devote all their care and attention to the males, but it is not so generally understood that the pullets must receive the same care and attention, and their strength must not be overtaxed. With the approach of cold weather the birds of both sexes should be well housed and given plenty of shelter. The food should be of a strengthening nature; at the same time over-stimulation should be avoided. Pullets which have not been forced to lay, and have slowly grown to maturity are the most suitable breeders. They must, too, be in good health, and this is at once apparent by their appearance—a red and full comb, bright eye, great activity, good appetite, close and tight in feather. These are all unmistakable signs of condition, and if



the male has been kept from all sexual intercourse, and is in the same state of health as the pullets, no tonic nor stimulating foods of any description are necessary. In fact, the birds are much better without them. The food, if of the right kind, will fully supply, in a natural way, all that is claimed for the stimulant. After trying many different mixtures and all the grains used as regular foods, we have invariably found that we achieved greater success in the percentage of fertile eggs by giving for the morning food bean meal, barley meal, and middlings, and three mornings a week, included with the foregoing, a little Indian meal. In the evening, as whole grain, it will be found that wheat and oats, varied by barley, contains the ratio to be aimed at to increase fertility. Green food, either raw or cooked, must be given daily, and about a fortnight before mating some form of animal food will be found of service. This, however, should only be used sparingly. How much to be given depends entirely upon the conditions of the run; that is, whether the birds are in confinement or have access to the open fields. This will not only maintain but increase vigour, which is so necessary in both sexes if the eggs are to be fertile.

## THE CHRISTMAS MARKETS AND WHAT THEY WANT.

AS Christmas is now fast approaching, a few words on the special requirements of the markets may be of interest and service to our readers. Generally speaking, at this period the demand for the abnormal in poultry produce is greater than at any other season of the year, larger and fatter birds being required, as the consuming public seek after something very special in the way of poultry, oftentimes passing over the smaller and tenderer chickens and preferring the bulkier proportions of the capon.

There seem, however, to be certain modifications taking place in the demand for large turkeys. Formerly very large birds were more in demand and, provided they were young, the heavier the bird the higher was its value per pound. Except for the reason of the demand, why the value per pound should advance as the weight increases is a little difficult to understand, as it does not at all follow that size should improve flesh qualities. The public are beginning to realise this and consequently medium-sized birds are more in demand than hitherto and the market for larger birds is a little more restricted. It must, however, be remembered that the smaller birds must be well covered with flesh, if the best values are to be realised.

In order to obtain the best results great care should be taken in every detail in the preparation of turkeys and all classes of poultry for the Christmas markets. Plucking is an important process in their preparation, as careless work seriously affects values. Care should be taken to avoid any tearing of the flesh in the process. All immature feathers, known in the trade as stubs, should be removed, as they are unsightly. English turkeys should be plucked clean, leaving no feathers except on the neck, as foreign birds are generally marketed with feathers left in the wings and tail as well as on the rump. Beyond twisting the pinion joints under the first joint of the

wing in the usual manner, no tying down should be resorted to. Twisting the pinion is not an absolute necessity when consigning to salesmen, as they will do this when hanging the birds up on view.

Large hampers are the best medium for packing. Those who do not possess these can hire them from the principal railway companies at a small cost. Those desirous of availing themselves of this opportunity should make early application to the local station-master to prevent disappointment, as there is a considerable demand during Christmas week for these hampers.

When packing turkeys, each bird should be carefully wrapped in grease-proof paper. The bottom of the hamper should be well covered with sweet clean straw, this again being covered with some softer material, such as wood wool or paper, to prevent the straw from damaging the back of the bird, which it is likely to do in the event of the hamper being roughly handled, either in transit by rail or on the markets. The birds should be placed on their backs side by side and the spaces between each bird carefully and firmly filled in with soft packing well covering the breast of the birds. Care should be taken to prevent the birds from coming into contact with the sides of the hamper; also, it is advisable to pack as firmly as possible.

From inquiries made it seems there will be a fairly large supply of foreign turkeys, and therefore we should be inclined to advise English producers to sell as many as possible locally—provided fair prices are obtainable—rather than risk too many on the open markets. It is always a difficult task to forecast prices, but a fair estimate would be from 10d. to 1s. 2d. per lb. for hen birds, and 11d. to 1s. 4d. to 1s. 6d. for cock birds. The latter price would be realised only by birds of exceptional quality.

There is always a large demand for capons at Christmas, and these should be packed and treated in the same manner as turkeys. Large ducks as well as geese of good quality are expected to realise good values. We have been informed that the supply of English geese is likely to be rather short this season. If this should prove to be correct good prices should be realised. As France is our greatest competitor in this branch of the industry, a good deal depends on the quality and quantity of geese she sends as to the values English birds will realise.

## How to Escape the Spit.

The late Frank Buckland, so well known as one of the leading authorities on British piscicultural matters, was in the habit of retailing a funny story, illustrative of the artfulness of common chickens. In former days it was difficult for visitors to get anything to eat at John o' Groats, there being no butchers or bakers within miles, and when visitors arrived it was the custom of the proprietor of the inn to chase and catch a chicken and pluck and roast him at once for dinner. In the course of time the chickens became so artful that they kept a sharp look-out, and when they saw a carriage coming along the road they bolted into the heather, and did not re-appear until the visitors had eaten their bacon without the chicken, and taken their departure.—*Farmers' Gazette.*



## MARKETS & MARKETING.

### Week Ending October 28.

The colder weather had a rather good effect on the market, and demand was fairly brisk. Poultry was plentiful, and hence prices did not show an appreciable increase. There seemed to be a general idea that turkeys were going to be excellent at Christmas, and glowing accounts were received of the quality and quantity of the growing turkeys.

The demand for new-laid eggs was brisk, but supplies were very limited.

### Week Ending November 4.

Prices showed an upward tendency, the demand for poultry being especially keen. The cold weather undoubtedly helped matters in this respect.

Famine prices were almost reached for new-laid eggs. Short supplies, coupled with a large demand, had the natural effect of hardening prices.

### Week Ending November 11.

There was little change to report from the previous week. Supplies of poultry and game were abundant, the value of the latter declining somewhat.

There was no change in the egg market.

### Week Ending November 18.

Game was extraordinary abundant. Not only so, but the birds were of remarkably good quality. This affected the trade in poultry somewhat, and had the natural effect of reducing their value. Some very nice Irish turkeys were on offer; there were also a few English and French birds.

Eggs remained very scarce and very dear.

## THE BUFF ORPINGTON CLUB.

AT the annual general meeting held at the Club Show, Crystal Palace, on Wednesday, November 15, at 5 p.m., a large number of members was present.

The minutes of the last annual general meeting were read and confirmed. The thirteenth annual report and balance-sheet was presented by the Chairman, and the same was passed and adopted.

**ELECTION OF OFFICERS.**—The election of officers ensued, and the president vacated the chair. Mr. W. Richardson was voted to the chair *pro tem*.

Mr. Frank Bloomer was unanimously re-elected president; Mr. E. A. Cass was also proposed, but withdrew in favour of Mr. Bloomer.

The Rev. T. W. Sturges, Messrs. J. L. Galway, and H. C. Thomas, the retiring vice-presidents, were re-elected *en bloc*; Miss L. Smith was elected to fill the vacancy caused by the retirement of Colonel Sandbach; Mr. H. O. Connell Jones was elected a vice-president in the place of Mr. H. Dickson (resigned), Mr. Jones to retire in 1912.

The retiring members of the committee—Mrs. Wilkinson, Messrs. W. H. Cook, W. G. French, and J. Holmes—were re-elected *en bloc*. Two more vacancies on the committee caused a ballot to be taken, and Messrs. M. Lindner and H. Hudson were elected to fill the same.

Mr. W. J. Golding was again elected hon. secretary and treasurer.

Mr. T. Threlford was re-elected hon. auditor.

W. J. GOLDING,

Hon. Sec. and Treasurer,

Westwood Farm, Weald, Kent.

## PROPOSED TABLE-POULTRY CLUB.

A PRELIMINARY meeting was held at the Crystal Palace on Wednesday, November 15, 1911, to consider the expediency of forming a special club to encourage the production of table-poultry. Present: Mr. Edward Brown, Hon. Sec. N.P.O.S.; Mr. Verney Carter, Organising Sec. the British Poultry Federation, Ltd.; Mr. S. C. Sharpe, Mr. Miles, Mr. C. Willis-Fleming, Mr. Percy Farrer, Mr. Argent, Mr. F. Hickson, Mr. W. M. Elkington, and Mr. J. G. Edwards. Mr. F. H. Wheeler telegraphed he was unable to attend, and expressed his keen interest in the movement.

The object of the meeting was to consider the advisability of forming a special club to look after the interests of table-poultry—a most important branch of the poultry industry.

After a short discussion it was resolved that a letter be sent to the committee of the Utility Poultry Club, asking if it was prepared to take steps to encourage the production of table-poultry in this country on similar lines to its efforts relating to egg-production.

A meeting was arranged to be held at the Agricultural Hall during the forthcoming Smithfield Fat Stock Show, to which all interested in the subject would be invited to attend, and it was hoped that a reply by that time would be received from the Utility Poultry Club.

## A VALUABLE FOOD.

THE "Phosto" Company of Emsworth secured an excellent position at the Crystal Palace for their stand, which became quite a centre of interest for a very large number of visitors, both English and Continental. This preparation of phosphates has won its way in only a year to the confidence and appreciation of a large number of our leading breeders, and the names on the testimonial list are sufficient to convince the most sceptical. It is very useful for young chicks from a day old, ensuring a healthy body on a large frame, and acts, moreover, as a natural stimulant to egg-production. Its influence on feathering generally, and during the moult, is also quite striking. "Phosto," owing to its action in aiding digestion, is now found to be a friend to the fattener as well as to the specialist breeder and utility poultry-keeper. Some excellent specimens of birds fattened with the aid of "Phosto" by Mr. F. H. Wheeler, of Marden, Kent, were exhibited in proof of this new development.

The popularity of "Phosto" is further proved by the fact that over 200 cups, medals, and awards have been won at the Crystal Palace by users of "Phosto."

**We are sorry that we have to hold over several of our usual features owing to lack of space.**



TABLE OF PRICES REALISED FOR HOME, COLONIAL, AND FOREIGN POULTRY,  
GAME, AND EGGS DURING THE FOUR WEEKS ENDING NOV. 18, 1911.

## ENGLISH POULTRY—LONDON MARKETS.

DESCRIPTION.	PRICES REALISED DURING THE MONTH.			
	1st Week.	2nd Week.	3rd Week.	4th Week.
	Each.	Each.	Each.	Each.
Surrey Chickens .....	2/3 to 4/3	2/6 to 4/6	2/6 to 4/6	2/6 to 4/6
Sussex " .....	2/3 " 4/3	2/6 " 4/6	2/6 " 4/6	2/6 " 4/6
Yorkshire " .....	1/6 " 3/3	1/6 " 3/3	1/9 " 3/0	1/9 " 3/0
Boston " .....	1/6 " 3/3	1/6 " 3/3	1/9 " 3/0	1/9 " 3/0
Essex " .....	1/6 " 3/3	1/6 " 3/3	1/9 " 3/0	1/9 " 3/0
Capons .....	—	—	—	—
Irish Chickens .....	1/3 " 2/3	1/3 " 2/3	1/3 " 2/3	1/3 " 2/3
Live Hens .....	1/0 " 2/3	1/3 " 2/3	1/3 " 2/4	1/3 " 2/3
Aylesbury Ducklings	—	—	—	—
Ducks .....	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/3 " 3/6
Geese .....	5/0 " 7/6	4/6 " 6/6	4/0 " 7/6	4/6 " 7/6
Turkeys, Cocks .....	5/6 " 10/6	5/6 " 10/6	5/0 " 10/0	5/0 " 10/0
" Hens .....	5/0 " 6/0	5/0 " 7/0	4/0 " 6/6	4/0 " 6/6

## ENGLISH GAME—LONDON MARKETS.

DESCRIPTION.	PRICES REALISED DURING THE MONTH.			
	1st Week.	2nd Week.	3rd Week.	4th Week.
	Each.	Each.	Each.	Each.
Grouse .....	2/0 to 2/6	2/3 to 2/9	2/6 to 3/0	2/6 to 3/0
Partridges .....	1/3 " 1/8	1/3 " 1/9	1/9 " 2/0	2/0 " 2/6
Pheasants .....	1/9 " 2/9	1/9 " 2/6	1/6 " 2/3	1/3 " 2/0
Black Game .....	1/6 " 2/3	1/9 " 2/6	2/0 " 2/6	2/0 " 2/6
Hares .....	1/3 " 2/6	1/3 " 2/6	1/3 " 2/6	1/3 " 2/3
Rabbits, Tame .....	1/0 " 2/0	1/0 " 2/0	1/0 " 2/0	1/0 " 2/3
" Wild .....	0/6 " 1/0	0/6 " 1/0	0/6 " 1/0	0/6 " 1/0
Pigeons, Tame .....	—	—	—	—
" Wild .....	—	—	—	—
Wild Duck .....	1/6 " 2/0	1/6 " 2/0	1/6 " 2/0	1/6 " 2/0
Woodcock .....	2/0 " 2/6	1/9 " 2/9	2/0 " 2/9	2/0 " 2/9
Snipe .....	0/6 " 1/0	0/6 " 1/3	0/6 " 1/3	0/6 " 1/3
Partridge .....	0/11, 1/1	0/11, 1/1	0/11, 1/1	0/11, 1/1

## ENGLISH EGGS (Guaranteed New-Laid).

MARKETS.	PRICES REALISED DURING THE MONTH.			
	Per 120.	Per 120.	Per 120.	Per 120.
LONDON .....	18/- to 19/-	18/- to 20/-	18/- to 20/-	18/- to 20/-
Provinces.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.
MANCHESTER ...	1/10	1/11	2/0	2/0
BRISTOL .....	1/8	1/9	1/9	1/10

## FOREIGN POULTRY—LONDON MARKETS.

COUNTRIES OF ORIGIN.	PRICES REALISED DURING THE MONTH.			
	Chickens, Each.	Ducks, Each.	Ducklings, Each.	Geese, Per lb.
Russia .....	1/6	—	—	—
Belgium .....	—	—	—	—
France .....	—	—	—	—
United States of America .....	—	—	—	—
Austria .....	—	—	—	—
Canada .....	—	—	—	—
Australia .....	—	—	—	—

FOREIGN GAME.  
LONDON MARKETS.

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Game.	Poultry.
Russia .....	£194	£445
France .....	3,326	£3,078
Austria-Hungary .....	—	—
United States of America .....	—	£17
Other Countries .....	£10,103	£1,794
Totals .....	£13,623	£5,934

IMPORTS OF POULTRY AND GAME.  
MONTH ENDING OCT. 31, 1911.

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Game.	Poultry.
Russia .....	£194	£445
France .....	3,326	£3,078
Austria-Hungary .....	—	—
United States of America .....	—	£17
Other Countries .....	£10,103	£1,794
Totals .....	£13,623	£5,934

## IRISH EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
Irish Eggs	12/0 to 14/0	13/0 to 15/0	14/0 to 16/0	15/0 to 17/0

## FOREIGN EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
French ...	12/0 to 14/0	13/0 to 15/0	14/0 to 16/0	15/0 to 18/0
Danish ...	12/0 " 14/0	15/0 " 16/0	15/0 " 16/0	17/0 " 18/0
Italian ...	11/9 " 13/0	12/9 " 13/6	13/9 " 14/6	15/0 " 17/0
Austrian...	8/3 " 10/9	8/3 " 10/9	9/0 " 11/6	9/3 " 12/0
Russian ...	7/3 " 9/6	7/3 " 10/0	7/9 " 10/6	7/6 " 10/9

## IMPORTS OF EGGS.

## MONTH ENDING OCT. 31, 1911.

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Quantities in Gt. Hund.	Declared Values.
Russia .....	1,176,254	£480,757
Denmark .....	376,375	£204,448
Germany .....	30,663	£12,785
Netherlands .....	29,953	£15,472
France .....	30,665	£19,959
Italy .....	31,632	£14,924
Austria-Hungary .....	60,697	£24,955
Other Countries .....	56,329	£27,169
Totals .....	1,798,568	£800,469